

State of California  
The Resources Agency

DEPARTMENT OF WATER RESOURCES  
Division of Operations and Maintenance

# STATE WATER PROJECT OPERATIONS DATA

For the month of:  
**January 1997**

**Pete Wilson**  
Governor  
State of California

**Douglas P. Wheeler**  
Secretary for Resources  
The Resources Agency

**David N. Kennedy**  
Director  
Department of Water Resources

State of California  
Resources Agency

**Department of Water Resources  
Division of Operations and Maintenance**

**State Water Project  
Operations Data**

for the Month of January 1997

## **Table of Contents**

### **Monthly Highlights**

#### **Oroville Field Division Water Operations**

**Table**

- 1 Antelope Lake, Daily Operation
- 2 Frenchman Lake, Daily Operation
- 3 Lake Davis, Daily Operation
- 4 Lake Oroville, Daily Operation
- 5 Thermalito Forebay, Including Diversion Pool and Power Canal, Daily Operation
- 6 Thermalito Afterbay, Daily Operation
- 7 Oroville-Thermalito Complex, Water Temperature Data

#### **Delta Field Division Water Operations**

**Table**

- 8 Aqueduct Operation, Delta Field Division
- 9 Delta Field Division Plant Data
- 10 Clifton Court Forebay, Daily Operation of Gates
- 11 Governor Edmund G. Brown California Aqueduct, Delta Field Division, Monthly Deliveries
- 12 South Bay Aqueduct, Delta Field Division, Monthly Deliveries
- 13 Lake Del Valle, Daily Operation

#### **San Luis Field Division Water Operations**

**Table**

- 14 Consolidated State-Federal O'Neill Forebay, Daily Operations
- 15 Consolidated State-Federal San Luis Reservoir, Daily Operations
- 16 San Luis Field Division Plant Data
- 17 Consolidated State-Federal Los Banos Reservoir, Daily Operations
- 18 Consolidated State-Federal Little Panoche Reservoir, Daily Operations
- 19a Governor Edmund G. Brown California Aqueduct, San Luis Field Division, Monthly Deliveries
- 19b Governor Edmund G. Brown California Aqueduct, San Luis Field Division, Monthly Deliveries
- 20 Consolidated State-Federal San Luis Canal, Daily Operations

#### **San Joaquin Field Division Water Operations**

**Table**

- 21 San Joaquin Field Division Plant Data
- 22a Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
- 22b Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
- 22c Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries
- 23 Governor Edmund G. Brown California Aqueduct, San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

## **Southern Field Division Water Operations**

### **Table**

- 24 Southern Field Division Plant Data
- 25 Pyramid Lake, Daily Operation
- 26 Elderberry Forebay, Daily Operation
- 27 Castaic Lake, Daily Operation
- 28 Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (West Branch)
- 29 Silverwood Lake, Daily Operation
- 30 Lake Perris, Daily Operation
- 31a Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (East Branch)
- 31b Governor Edmund G. Brown California Aqueduct, Southern Field Division, Monthly Deliveries (East Branch)

## **Water Quality Operations**

### **Table**

- 32 Water Quality at Selected SWP Locations
- 33 Water Quality at Selected Delta Stations
- 34 Pesticides, Herbicides, and Other Organic Substances Detected in the SWP

## **Energy Operations**

### **Table**

- 35 Oroville and Delta Field Divisions Energy Data
- 36 San Luis Field Division Energy Data
- 37 San Joaquin Field Division Energy Data
- 38 Southern Field Division Energy Data

## **MONTHLY HIGHLIGHTS**

The following highlights are activities or actions that impacted State Water Project operations during the month of January 1997.

Over 19 inches of precipitation fell in the northern Sierra during January, more than twice normal. The seasonal average through the end of January stood at around 58 inches, also more than 200 percent of average. A total of 25 inches fell in the Feather River basin over an eight-day period ending January 3. Rainfall totals at Bucks Lake in the FRSA for the same period exceeded 42 inches. Sacramento River flood system flows exceeded 600,000 cfs (the record is 650,000 cfs in February 1986). Two levee breaks along the Feather River and the Sutter Bypass inundated the town of Arboga and parts of Olivehurst while flooding more than 40,000 acres in Sutter county.

Snow levels were high during the major storm events so the snowpack percentages were not quite as large, especially in the north where the mountains are lower. The statewide pack was about 160 percent of average for this date and already 100 percent of normal April 1 snowpack water content. About 35 percent of the snow accumulation season was left by the end of January.

Runoff during January was almost 400 percent of average for the month. Storms which started at the end of December caused a daily average peak inflow of nearly 277,000 cfs at Oroville on January 1 which raised Oroville storage into flood control space. Antelope and Frenchman Lakes spilled a combined total of just over 26,000 AF. Oroville spill at just over 1.8 MAF was the largest monthly total on record since initial fill began in November 1967. (The next largest spill of record occurred in January 1970, totaling 1,545,271 AF.) The amount spilled at Oroville for 22 consecutive days ending January 17 was 2,013,299 AF (enough to fill San Luis Reservoir). Required flood control space was restored on January 12. The only other flood related release was at Lake Del Valle, 30,555 AF to Arroyo Valle. SWP began accepting floodwaters into the California Aqueduct through the Kern River Intertie on January 11, totaling 25,566 AF through the month. The water taken in would have otherwise caused increased flooding in the Tulare Lake Basin. East Branch outages, full reservoirs, and low demands have limited our ability to help the Tulare Lake interests. The California Aqueduct received minor inflows of floodwater from Salt Creek and Cantua Creek but none was taken into the canal from Arroyo Pasajero.

To relieve South Delta flooding and provide emergency flood control space, pumping at Banks exceeded Clifton Court Forebay inflows at mid-month. This reduced the Forebay water surface to minimum operational elevation. It was not necessary to refill the forebay until January 22.

Reservoir storage was 138 percent of average on January 1 and increased over 1 MAF to about 135 percent on February 1 in spite of heavy flood control releases. Total storage in major SWP reservoirs was about 4.6 MAF on January 31, compared with 4.2 MAF this time in 1996. January 31 storage at Lake Oroville was about 2.9 MAF compared to 2.7 MAF at this time last year. The State's share of San Luis Reservoir storage was about 1.1 MAF, compared with 897,000 AF this time last year. The combined storage in our southern reservoirs was 615,000 AF on January 31 compared with 597,000 AF at this time last year. SWP water deliveries through January 31 were 53,000 AF representing a combination of annual entitlement, carryover, interruptible, and exchange waters. This is 78,000 AF less than delivered during the same period in 1996.

**Table 1. Antelope Lake**

Daily Operation  
(in acre-feet except as noted)

Capacity: 22,566 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in CFS					Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Dec 31	5003.46	23,943								
1	5007.19	27,685	3,742	20	0	0	2,440			
2	5006.69	27,165	-520	20	0	0	1,782			
3	5005.26	25,710	-1,455	20	0	0	1,074			
4	5004.43	24,806	-904	20	0	0	626			
5	5003.91	24,378	-428	20	0	0	407			
6	5003.60	24,078	-300	20	0	0	298			
7	5003.40	23,886	-192	20	0	0	238			
8	5003.29	23,780	-106	20	0	0	197			
9	5003.16	23,656	-124	20	0	0	169			
10	5003.10	23,599	-57	20	0	0	151			
11	5003.02	23,523	-76	20	0	0	134			
12	5002.96	23,466	-57	20	0	0	116			
13	5002.83	23,342	-124	20	0	0	114			
14	5002.79	23,305	-37	20	0	0	100			
15	5002.78	23,295	-10	20	0	0	94			
16	5002.78	23,295	0	20	0	0	92			
17	5002.78	23,295	0	20	0	0	92			
18	5002.77	23,286	-9	20	0	0	92			
19	5002.75	23,267	-19	20	0	0	89			
20	5002.76	23,276	9	20	0	0	89			
21	5002.76	23,276	0	20	0	0	96			
22	5002.83	23,342	66	20	0	0	96			
23	5002.78	23,295	-47	20	0	0	93			
24	5002.77	23,286	-9	20	0	0	96			
25	5002.84	23,352	66	20	0	0	110			
26	5002.90	23,409	57	20	0	0	114			
27	5002.88	23,390	-19	20	0	0	112			
28	5002.87	23,380	-10	20	0	0	108			
29	5002.84	23,352	-28	20	0	0	100			
30	5002.81	23,324	-28	20	0	0	98			
31	5002.81	23,324	0	20	0	0	98			
Total cfs-days				- - -	620	0	0	9,515	34	
Total acre-feet				-619	1,230	0	0	18,873	67	
									20,170	
									19,551	

1/ Values not available on a daily basis.

**Table 2. Frenchman Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in CFS						Computed Inflow	
				Regulated Release				Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right	Total Regulated Release				
Dec 31	5583.04	47,985									
1	5586.04	52,434	4,449	2	0	0	2	0			
2	5588.63	56,478	4,044	2	0	0	2	38			
3	5589.41	57,733	1,255	2	0	0	2	157			
4	5589.64	58,107	374	2	0	0	2	288			
5	5589.54	58,025	-82	2	0	0	2	318			
6	5589.51	57,895	-130	2	0	0	2	297			
7	5589.41	57,733	-162	2	0	0	2	271			
8	5589.31	57,571	-162	2	0	0	2	243			
9	5589.21	57,410	-161	2	0	0	2	216			
10	5589.13	57,281	-129	2	0	0	2	193			
11	5589.05	57,152	-129	2	0	0	2	173			
12	5588.95	56,991	-161	2	0	0	2	152			
13	5588.91	56,926	-65	2	0	0	2	136			
14	5588.83	56,798	-128	2	0	0	2	123			
15	5588.78	56,748	-50	2	0	0	2	108			
16	5588.74	56,654	-94	2	0	0	2	100			
17	5588.71	56,606	-48	2	0	0	2	92			
18	5588.70	56,590	-16	2	0	0	2	88			
19	5588.67	56,542	-48	2	0	0	2	86			
20	5588.64	56,494	-48	2	0	0	2	81			
21	5588.63	56,478	-16	2	0	0	2	77			
22	5588.68	56,558	80	63	0	0	63	81			
23	5588.54	56,334	-224	100	0	0	100	71			
24	5588.44	56,175	-159	100	0	0	100	51			
25	5588.49	56,254	79	100	0	0	100	46			
26	5588.49	56,254	0	100	0	0	100	51			
27	5588.43	56,159	-95	100	0	0	100	46			
28	5588.38	56,079	-80	100	0	0	100	38			
29	5588.29	55,936	-143	100	0	0	100	29			
30	5588.24	55,857	-79	100	0	0	100	19			
31	5588.26	55,888	31	100	0	0	100	18			
Total cfs-days				- - -	1,005	0	0	1,005	3,687	56	
Total ac-ft				7,903	1,993	0	0	1,993	7,313	112	
										17,321	

1/ Values not available on a daily basis.

**Table 3. Lake Davis**

Daily Operation  
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in CFS							Computed Inflow 1/	
				Regulated Release				Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/		
				Stream-flow Maint.	Water Supply Contract 1/	Water Right	Total Regulated Release 1/					
Dec 31	5771.95	72,572										
1	5773.63	78,955	6,383	209		0		0				
2	5774.36	82,691	3,736	209		0		0				
3	5774.80	83,569	878	209		0		0				
4	5774.88	83,889	320	209		0		0				
5	5774.89	83,929	40	209		0		0				
6	5774.87	83,849	-80	209		0		0				
7	5774.83	83,689	-160	209		0		0				
8	5774.87	83,849	160	203		0		0				
9	5774.82	83,649	-200	210		0		0				
10	5774.75	83,369	-280	210		0		0				
11	5774.68	83,090	-279	210		0		0				
12	5774.56	82,612	-478	210		0		0				
13	5774.43	82,096	-516	210		0		0				
14	5774.41	82,016	-80	210		0		0				
15	5774.34	81,739	-277	210		0		0				
16	5774.26	81,423	-316	210		0		0				
17	5774.13	80,911	-512	210		0		0				
18	5774.11	80,832	-79	210		0		0				
19	5774.02	80,479	-353	210		0		0				
20	5773.92	80,087	-392	210		0		0				
21	5773.83	79,735	-352	210		0		0				
22	5773.93	80,126	391	210		0		0				
23	5773.87	79,892	-234	210		0		0				
24	5773.85	79,813	-79	210		0		0				
25	5773.85	79,813	0	210		0		0				
26	5773.90	80,009	196	210		0		0				
27	5773.81	79,657	-352	193		0		0				
28	5773.77	79,501	-156	210		0		0				
29	5773.71	79,268	-233	210		0		0				
30	5773.65	79,034	-234	210		0		0				
31	5773.60	78,840	-194	210		0		0				
Total cfs-days				---	6,479	1	0	6,479	0	139	6,619	
Total ac-ft				6,268	12,851	1	0	12,852	0	276	13,128	
											9,779	
											19,396	

1/ Values not available on a daily basis.

**Table 4. Lake Oroville**

Daily Operation  
(in acre-feet except as noted)

Capacity: 3,537,580 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow						Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Spillway Leakage 2/	Evaporation 3/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 4/
Dec 31	858.87	2,929,103									
1	879.66	3,226,425	297,322	1,395	0	0	0	249,876	251,271	0	548,593
2	886.75	3,332,558	106,133	60	0	0	18	258,512	258,590	0	364,723
3	885.59	3,315,024	-17,534	60	0	0	28	217,934	218,022	0	200,488
4	880.26	3,235,307	-79,717	60	0	0	18	202,355	202,433	0	122,716
5	873.57	3,137,218	-98,089	3,122	0	0	9	177,373	180,504	0	82,415
6	866.66	3,038,133	-99,085	7,928	4	0	80	151,488	159,500	0	60,415
7	860.79	2,955,715	-82,418	14,453	5	0	69	118,901	133,428	0	51,010
8	856.56	2,897,310	-58,405	22,189	5	0	85	82,479	104,758	0	46,353
9	852.81	2,846,216	-51,094	27,305	5	0	25	65,298	92,633	0	41,539
10	849.67	2,803,924	-42,292	28,580	5	0	17	51,942	80,544	0	38,252
11	847.56	2,775,753	-28,171	29,841	6	0	8	31,074	60,929	0	32,758
12	846.29	2,758,894	-16,859	29,865	6	0	16	18,326	48,213	0	31,354
13	845.15	2,743,821	-15,073	29,870	6	0	0	12,397	42,273	0	27,200
14	843.88	2,727,097	-16,724	29,952	6	0	0	13,099	43,057	0	26,333
15	842.91	2,714,373	-12,724	29,976	6	0	162	10,107	40,251	0	27,527
16	842.15	2,704,432	-9,941	29,768	6	0	0	4,537	34,311	0	24,370
17	841.74	2,699,079	-5,353	28,478	6	0	24	1,496	30,004	0	24,651
18	841.32	2,693,604	-5,475	26,903	6	120	24	0	27,053	0	21,578
19	840.99	2,689,308	-4,296	27,108	6	120	32	0	27,266	0	22,970
20	841.02	2,689,698	390	23,470	6	120	8	0	23,604	0	23,994
21	841.02	2,689,698	0	26,314	6	120	24	0	26,464	0	26,464
22	843.07	2,716,469	26,771	25,316	3	120	64	0	25,503	0	52,274
23	843.73	2,725,127	8,658	26,248	0	0	0	7,149	33,397	0	42,055
24	842.16	2,704,562	-20,565	29,732	0	0	8	22,653	52,393	0	31,828
25	844.91	2,740,655	36,093	29,240	0	0	8	7,273	36,521	0	72,614
26	851.79	2,832,429	91,774	28,122	0	120	8	0	28,250	0	120,024
27	854.75	2,872,569	40,140	29,328	3	0	0	10,992	40,323	0	80,463
28	855.53	2,883,213	10,644	29,330	4	0	17	33,720	63,071	0	73,715
29	855.55	2,883,486	273	28,902	4	0	51	32,851	61,808	0	62,081
30	854.81	2,873,387	-10,099	29,199	4	0	42	34,140	63,385	0	53,286
31	853.83	2,860,051	-13,336	28,785	4	0	17	32,413	61,219	0	47,883
<b>Total</b>		-69,052	700,899	112	720	862	1,848,385	2,550,978	0	2,481,926	

1/ Includes bypass flows

2/ Only occurs when Lake water elevation is greater than or equal to 813.00 and there is no spill.

3/ Evaporation will be zero for days when there is precipitation or heavy overcast.

4/ Does not include pumpback.

**Table 5. Thermalito Forebay**  
**Including Diversion Pool and Power Canal**

Daily Operation

(in acre-feet except as noted)

Capacity: 25,120 ac-ft

**January 1997**

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County	Thermalito Irrigation District	Releases To River 4/	Hyatt Powerplant Pumpback	
Dec 31	22,983										
1	24,676	1,693	251,271	495	0	22,757	0	0	242,189	0	14,873
2	22,522	-2,154	258,572	292	0	19,730	0	0	250,121	0	8,833
3	23,048	526	217,994	216	0	34,188	0	0	188,038	0	4,542
4	23,067	19	202,415	434	0	34,609	0	0	172,368	0	4,147
5	22,877	-190	180,495	495	0	34,161	0	0	150,748	0	3,729
6	22,705	-172	159,416	495	0	33,783	0	0	128,334	0	2,034
7	21,770	-935	133,354	492	0	33,767	0	0	99,970	0	-1,044
8	23,105	1,335	104,668	499	0	33,897	0	0	70,020	0	85
9	22,504	-601	92,603	495	0	33,936	0	0	57,722	0	-2,041
10	22,848	344	80,522	502	0	34,340	0	0	44,631	0	-1,709
11	22,955	107	60,915	504	0	35,311	0	0	24,401	0	-1,600
12	23,032	77	48,191	499	0	35,286	0	0	12,024	0	-1,303
13	22,476	-556	42,267	480	0	35,384	0	0	7,006	0	-913
14	22,994	518	43,051	502	0	32,556	0	0	7,026	0	-3,453
15	23,156	162	40,083	499	0	34,676	0	0	5,181	0	-563
16	22,548	-608	34,305	504	0	33,513	0	0	1,924	0	20
17	23,636	1,088	29,974	500	0	28,493	0	0	1,220	0	327
18	23,520	-116	27,023	502	0	26,608	0	0	1,198	0	165
19	23,893	373	27,228	500	0	26,305	0	0	1,190	0	140
20	23,622	-271	23,590	500	0	23,311	0	0	1,265	0	215
21	22,997	-625	26,434	530	0	26,561	0	0	1,258	0	230
22	23,393	396	25,436	484	0	27,127	0	0	1,644	0	3,247
23	22,880	-513	33,397	534	0	26,643	0	0	7,259	0	-542
24	22,877	-3	52,385	466	0	26,514	0	0	21,999	0	-4,341
25	23,687	810	36,513	417	0	29,423	0	0	9,326	0	2,629
26	23,348	-339	28,242	436	0	29,332	0	0	1,525	0	1,840
27	22,958	-390	40,320	341	0	28,945	0	0	10,913	0	-1,193
28	23,143	185	63,050	383	0	29,423	0	0	32,117	0	-1,708
29	23,435	292	61,753	492	0	28,205	0	0	31,918	0	-1,830
30	23,453	18	63,339	502	0	29,571	0	0	32,117	0	-2,135
31	22,500	-953	61,198	490	0	32,244	1	0	28,348	0	-2,048
Total		-483	2,550,004	14,480	0	940,599	1	0	1,645,000	0	20,633

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, spill, and spillway leakage.

3/ Includes Bypass flows at Thermalito.

4/ The sum of the flows from fish barrier dam and the fish hatchery.

**Table 6. Thermalito Afterbay**

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Dec 31	130.54	33,970										
1	132.05	39,302	5,332	22,757	156	0	150	0	22,219	0	5,101	264,408
2	131.59	37,639	-1,663	19,730	0	0	0	0	22,021	0	628	272,142
3	131.52	37,389	-250	34,188	0	0	0	0	32,133	0	-2,305	220,171
4	131.54	37,460	71	34,609	0	0	0	0	31,938	0	-2,600	204,306
5	131.62	37,747	287	34,161	0	0	0	0	32,133	0	-1,741	182,881
6	131.87	38,647	900	33,783	65	0	44	0	31,938	0	-837	160,272
7	132.13	39,595	948	33,767	126	0	99	0	31,938	0	-656	131,908
8	132.31	40,257	662	33,897	151	0	127	0	31,937	0	-1,020	101,957
9	132.43	40,701	444	33,936	167	0	158	0	31,934	0	-1,233	89,656
10	132.40	40,590	-111	34,340	173	0	165	0	32,728	0	-1,386	77,359
11	132.50	40,961	371	35,311	222	0	165	0	32,926	0	-1,627	57,327
12	132.54	41,110	149	35,286	242	0	165	0	32,926	0	-1,804	44,950
13	132.63	41,446	336	35,384	262	0	165	0	32,926	0	-1,696	39,932
14	132.63	41,446	0	32,556	282	0	182	0	33,124	0	1,033	40,150
15	132.59	41,297	-149	34,676	214	0	196	0	32,926	0	-1,489	38,107
16	132.58	41,260	-37	33,513	0	0	194	0	31,934	0	-1,422	33,858
17	132.33	40,331	-929	28,493	0	0	194	0	27,769	0	-1,459	28,989
18	132.40	40,590	259	26,608	0	0	194	0	24,794	0	-1,361	25,992
19	132.38	40,516	-74	26,305	0	0	194	0	24,794	0	-1,391	25,984
20	131.59	37,639	-2,877	23,311	0	0	194	0	24,794	0	-1,200	26,059
21	131.73	38,142	503	26,561	0	0	196	0	24,794	0	-1,068	26,052
22	132.46	40,812	2,670	27,127	0	0	201	0	24,794	0	538	26,438
23	132.12	39,558	-1,254	26,643	0	0	198	0	26,777	0	-922	34,036
24	132.21	39,888	330	26,514	0	0	109	0	27,967	0	1,893	49,966
25	132.57	41,222	1,334	29,423	0	0	0	0	28,364	0	275	37,690
26	132.45	40,775	-447	29,332	0	0	0	0	28,761	0	-1,018	30,286
27	132.23	39,962	-813	28,945	0	0	0	0	28,364	0	-1,394	39,277
28	132.24	39,999	37	29,423	0	0	0	0	27,967	0	-1,419	60,084
29	131.99	39,083	-916	28,205	0	0	0	0	27,967	0	-1,154	59,885
30	132.03	39,229	146	29,571	0	0	0	0	27,967	0	-1,458	60,084
31	132.18	39,778	549	32,244	0	0	0	0	30,546	0	-1,149	58,894
Total		5,808		940,599	2,060	0	3,290	0	904,100	0	-25,341	2,549,100

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

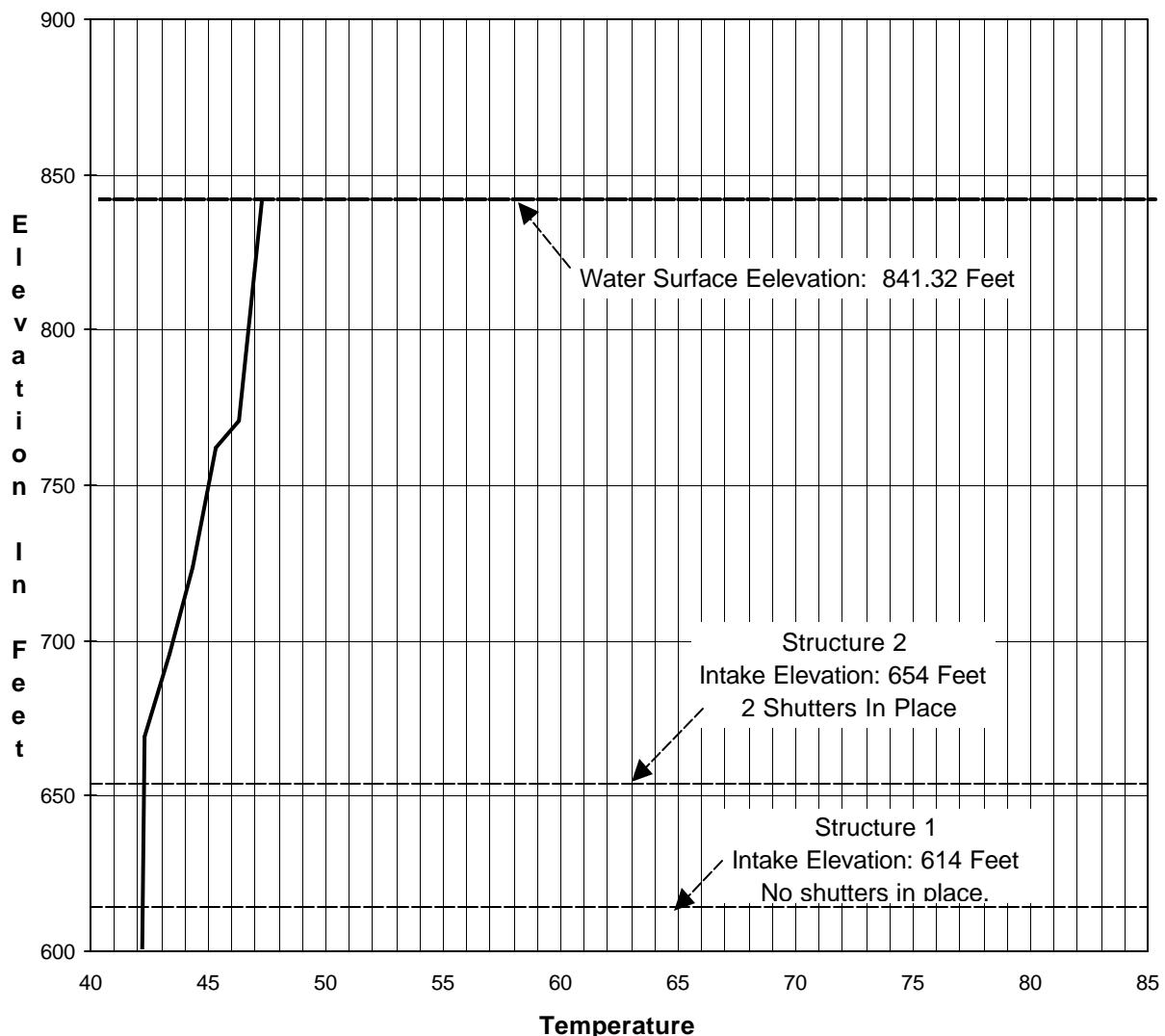
**Table 7. Oroville-Thermalito Complex**

Water Temperature Data

(in degrees Fahrenheit)

**January 1997**

Date	Mean Daily Temperature	
	Afterbay Outlet	Fish Hatchery
1	52	50
2	52	50
3	51	49
4	49	49
5	48	49
6	47	49
7	47	49
8	47	48
9	47	48
10	47	48
11	47	47
12	46	47
13	44	47
14	44	47
15	45	47
16	46	47
17	46	47
18	47	47
19	46	47
20	46	46
21	46	46
22	46	46
23	46	47
24	46	47
25	46	47
26	48	46
27	47	46
28	47	47
29	47	47
30	47	47
31	47	47

**Lake Oroville Temperature Profile****On January 18, 1997**

**Table 8. Aqueduct Operation****Delta Field Division**

(in acre-feet except as noted)

**January 1997****North Bay Aqueduct**

Pumped at Barker Slough	1,087
Travis Turnout	94
Fairfield/Vacaville Turnout	0
Pumped at Cordelia	937
Cordelia Spillway	0
Computed Losses (-) or Gains (+)	-56
Benicia Turnout	849
Vallejo Turnout	0
American Canyon 1	88
American Canyon 2	0
Napa Treatment Plant	0
Total Deliveries (After Cordelia)	937
Change in Storage at Napa Terminal Tank	0

**California Aqueduct**

Amount Pumped at Banks Pumping Plant	45,266
Amount Pumped at South Bay Pumping Plant	2,088
Deliveries From California Aqueduct ( Oak Flat Water District, Tracy Golf, Veterans Cemetery, and Musco Olive)	27
Inflow into California Aqueduct	0
Change in Storage	472
Flow Past Check 12	41,655
Computed Losses (-) or Gains (+)	-1,024

**Table 9. Delta Field Division Plant Data**

(in acre-feet)

**January 1997**

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct		
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant	
			Total	SWP		Into Lake	Into Aqueduct
1	18	13	2,227	2,227	138	0	0
2	22	19	785	785	75	0	0
3	35	28	3,470	3,470	57	0	0
4	30	28	0	0	65	0	0
5	40	35	0	0	52	0	0
6	36	32	375	375	65	0	0
7	37	32	0	0	60	0	0
8	30	28	0	0	65	0	0
9	37	33	552	552	65	0	0
10	37	34	0	0	65	0	0
11	34	28	1,658	1,658	65	0	0
12	40	34	11,460	11,460	65	0	0
13	33	28	5,177	5,177	85	0	0
14	42	35	5,006	5,006	61	0	0
15	32	28	187	187	62	0	0
16	40	34	0	0	64	0	0
17	38	32	0	0	55	0	0
18	36	28	0	0	65	0	0
19	41	35	0	0	74	0	0
20	35	31	0	0	64	0	0
21	32	28	0	0	81	0	0
22	43	35	0	0	67	0	0
23	37	32	1,746	1,746	62	0	0
24	32	29	812	812	54	0	0
25	34	28	0	0	53	0	0
26	40	34	0	0	54	0	0
27	39	34	8	8	65	0	0
28	33	28	2,451	2,451	69	0	0
29	40	34	2,728	2,728	66	0	0
30	33	30	4,491	4,491	79	0	0
31	31	30	2,133	2,133	71	0	0
Total	1,087	937	45,266	45,266	2,088	0	0

**Table 10. Clifton Court Forebay**  
Daily Operation of Gates

January 1997

**Table 11. Governor Edmund G. Brown California Aqueduct**

## Delta Field Division, Monthly Deliveries

(In acre-feet)

January 1997

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	USBR	Misc.	Loan Water	1996 Carryover Ent.		
	No.	Structure	Mile									
2A	1	Banks Pumping Plant	3.32		45,266	26	26	0	0	0		
		South Bay Pumping Plant	4.49	Bethany Reservoir Inlet	2,088							
		Check No. 1	5.95									
		Check No. 2	12.01									
	3		12.47	Musco Olive	26							
		Check No. 3	18.29									
	4		22.16	Tracy Golf & Country Club	0							
		Check No. 4	23.99									
	5	Check No. 5	29.73									
	6	Check No. 6	34.24									
	7		35.22	Turlock Fruit Company Inflow	0							
		Check No. 7	39.91									
2B	8		42.46	Oak Flat Water District-A	0	0	0	0	0	0		
			43.81	Oak Flat Water District-B	0							
			44.64	Oak Flat Water District-C	0							
		Check No. 8	45.97									
	9		46.18	Oak Flat Water District-D	0							
				Oak Flat Totals:	0							
	10	Check No. 9	51.30			1	0	0	0	0		
		Check No. 10	56.86									
	11	Check No. 11	61.40									
	12		66.14	Veteran's Cemetery	1							
		Check No. 12	66.71		41,655							

## **Table 12. South Bay Aqueduct**

Delta Field Division, Monthly Deliveries

(In acre-feet)

January 1997

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Entitlement	1996 Carryover M&I Ent.	Local	Rec.	Drought Bank	Oper. Flood Loss		
	No.	Structure	Mile										
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	2,088	2	313	313	313	313	313		
			3.17	Granite - Vasco Rd. (Temp.)	0								
			3.18	Oakland Scavenger Zone 7	2								
	Check No. 1	3.91											
	Check No. 2	5.21											
2	3		7.21	Zone 7 Altamont	0	4	15	15	15	15	15		
		Check No. 3	9.49	Zone 7 Patterson	313								
	4	Check No. 4	10.68										
4	5	Check No. 5	12.29			4	1,216	1,216	1,216	1,216	1,216		
	6		13.55	Zone 7 Wente #1	0								
			14.16	Zone 7 Wente #2	0								
		Check No. 6	14.65										
	7		14.78	Zone 7 Arroyo Mocho	0								
		Check No. 7	16.38										
			16.57	Zone 7 Wente #3	0								
	8		16.69	Zone 7 Norman Nursery	0								
			16.70	Zone 7 Concannon	0								
		Del Valle Branch Pipeline Junction	18.63	(into South Bay Aqueduct)	1,231								
5	8	Deliveries through Del Valle Branch Pipeline		Arroyo Valle #1 & #2 Project Water	0	4	72	72	72	72	72		
				Arroyo Valle #1 & #2 Inflow Released	15								
				Lake Del Valle Recreation	0								
				Zone 7 Wente #5	0								
			19.20	So. Livermore Project	0								
6				So. Livermore Inflow Released	1,216	4	1,785	1,785	1,785	1,785	1,785		
				So. Livermore Inflow Exchanged	72								
			19.21	Zone 7 - Kalthrof Detjens	4								
				ACWD									
7		La Costa Tunnel	22.50	Vallecitos - Flood Release	0	141	141	141	141	141	141		
			25.97	City of San Francisco San Antonio	0								
				ACWD - Bayside 1 & 2 Project Water:	0								
8		Mission Tunnel	28.97	Inflow Exchanged:	1,785	141	141	141	141	141	141		
				Stored Released:	0								
9		Santa Clara Pipeline	35.86	S.C.V.W.D. Meter	141								

Table 13. Lake Del Valle

## Daily Operation

(in acre-feet except as noted)

January 1997

Capacity: 77,106 ac-ft

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/ , 3/	From South Bay Aqueduct	Arroyo Valle 3/	South Bay Aqueduct 3/	Recreation Deliveries 2/	Evaporation	Total Outflow 3/	
Dec 31	687.95	30161									
1	692.14	32693	2532		0			0	2		0.56
2	700.19	37957	5264		0			0	0		1.12
3	702.57	39611	1654		0			0	0		0.32
4	701.07	38564	-1047		0			0	1		Trace
5	700.14	37923	-641		0			0	1		0.22
6	699.73	37643	-280		0			0	2		0.00
7	699.16	37255	-388		0			0	3		0.00
8	698.97	37127	-128		0			0	2		0.00
9	699.08	37201	74		0			0	4		0.00
10	699.14	37242	41		0			0	3		0.00
11	699.17	37262	20		0			0	3		0.00
12	699.23	37303	41		0			0	0		0.41
13	699.24	37309	6		0			0	1		0.02
14	699.20	37282	-27		0			0	3		0.00
15	699.38	37405	123		0			0	0		0.20
16	699.55	37520	115		0			0	0		0.01
17	699.63	37575	55		0			0	1		Trace
18	699.65	37588	13		0			0	1		0.00
19	699.65	37588	0		0			0	1		0.00
20	700.02	37841	253		0			0	2		0.45
21	700.88	38432	591		0			0	1		0.50
22	703.89	40547	2115		0			0	0		0.41
23	710.27	45271	4724		0			0	1		0.81
24	707.37	43082	-2189		0			0	0		0.00
25	708.67	44054	972		0			0	0		0.77
26	711.59	46290	2236		0			0	0		0.39
27	708.88	44213	-2077		0			0	2		Trace
28	704.93	41294	-2919		0			0	1		0.00
29	700.45	38136	-3158		0			0	3		0.00
30	698.78	36998	-1138		0			0	4		0.00
31	699.26	37323	325		0			0	1		0.00
Total		7162	38992	0	30555	1231	0	44	31830	6.19	

1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.

2/ To East Bay Regional Park District.

3/ Not available on a daily basis.

NR=No Records

**Table 14. Consolidated State-Federal O'Neill Forebay**

Daily Operations

**January 1997**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 56,430 Acre-feet

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliv- erries 2/	
Dec 31	221.39	46,784										
1	220.21	43,697	-3,087	0	4,028	0	784	0	5,168	1,331	0	131
2	220.80	45,237	1,540	0	3,994	521	342	0	2,923	1,308	0	150
3	222.49	49,687	4,450	0	3,817	782	1,721	0	2,978	1,340	0	242
4	221.94	48,229	-1,458	0	3,993	0	0	0	2,993	1,838	0	103
5	221.37	46,731	-1,498	0	3,867	0	0	0	3,244	1,454	0	76
6	221.74	47,703	972	0	3,771	854	0	0	2,887	1,296	0	48
7	221.88	48,071	368	0	3,778	683	0	0	2,879	1,369	0	-27
8	222.48	49,660	1,589	0	3,780	1,487	0	0	2,867	1,525	0	-74
9	223.30	51,848	2,188	0	3,905	1,475	0	0	2,724	1,449	0	-104
10	222.80	50,513	-1,335	0	3,813	0	0	0	3,119	1,191	0	-176
11	221.83	47,940	-2,573	0	3,787	0	738	0	4,191	1,411	0	-220
12	222.96	50,939	2,999	0	3,771	0	5,559	0	6,515	1,270	0	-33
13	221.43	46,889	-4,050	0	2,716	0	2,863	0	6,380	1,135	0	-106
14	222.37	49,368	2,479	0	3,632	0	2,237	0	3,586	1,133	0	100
15	222.34	49,288	-80	0	3,543	0	0	0	1,861	1,714	0	-8
16	223.61	52,679	3,391	0	3,379	0	0	0	0	1,594	0	-75
17	223.25	51,714	-965	0	2,700	346	0	0	1,778	1,559	0	-196
18	222.35	49,314	-2,400	0	1,759	0	0	0	1,502	1,429	0	-38
19	221.87	48,045	-1,269	0	558	0	0	0	0	1,198	0	0
20	221.82	47,914	-131	0	98	1,517	51	0	0	1,619	5	-108
21	221.05	45,892	-2,022	0	231	0	0	0	0	1,480	5	235
22	220.08	43,360	-2,532	0	145	0	0	0	0	1,485	6	69
23	219.86	42,790	-570	0	246	0	483	0	0	1,031	6	21
24	221.11	46,049	3,259	0	47	2,060	531	0	0	557	6	-432
25	221.60	47,336	1,287	0	161	1,373	0	0	16	273	6	-590
26	220.36	44,088	-3,248	0	30	787	63	0	1,687	1,243	6	418
27	219.29	41,323	-2,765	0	252	1,312	0	0	1,865	1,201	6	114
28	219.29	41,323	0	0	16	1,400	1,144	0	1,480	1,224	6	150
29	218.33	38,895	-2,428	0	0	0	1,255	0	1,310	1,228	6	65
30	218.53	39,398	503	0	0	0	2,248	0	800	1,248	6	60
31	218.70	39,825	427	0	0	1,043	981	0	800	1,103	6	100
<b>TOTAL</b>			-6,959	0	65,817	15,640	21,000	0	65,553	40,236	70	-105
<b>MEAN CFS</b>			---	0	2,123	505	677	0	2,115	1,298	2	-3
<b>ACRE-FEET</b>			-6,959	0	130,544	31,025	41,655	0	130,026	79,814	138	-205

1/ Pump-in located at Mile 79.67R.

2/ Includes 14 AF delivered to DFG at O'Neill Forebay

**Table 15. Consolidated State-Federal San Luis Reservoir**

Daily Operations

**January 1997**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)	Evap. (in)	Prec. (in)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Sisk Dam Spill				
Dec 31	533.10	1,903,404									
1	533.99	1,914,478	11,074	5,168	0	164	0	579	0.00	0.05	
2	534.55	1,921,457	6,979	2,923	521	196	0	1,313	0.04	0.53	
3	534.84	1,925,075	3,618	2,978	782	205	0	-167	0.00	0.99	
4	535.27	1,930,443	5,368	2,993	0	205	0	-82	0.15	0.01	
5	535.76	1,936,567	6,124	3,244	0	205	0	48	0.02	0.38	
6	535.96	1,939,069	2,502	2,887	854	205	0	-567	0.08	0.00	
7	536.25	1,942,698	3,629	2,879	683	205	0	-161	0.19	0.00	
8	536.40	1,944,576	1,878	2,867	1,487	205	0	-228	0.04	0.00	
9	536.55	1,946,455	1,879	2,724	1,475	230	0	-72	0.03	0.00	
10	537.00	1,952,095	5,640	3,119	0	217	0	-59	0.03	0.00	
11	537.62	1,959,875	7,780	4,191	0	220	0	-49	0.01	0.01	
12	538.61	1,972,320	12,445	6,515	0	221	0	-20	0.00	0.12	
13	539.54	1,984,036	11,716	6,380	0	202	0	-271	0.00	0.30	
14	540.03	1,990,219	6,183	3,586	0	215	0	-254	0.00	0.00	
15	540.36	1,994,386	4,167	1,861	0	208	0	448	0.17	0.62	
16	540.35	1,994,260	-126	0	0	170	0	106	0.01	0.03	
17	540.50	1,996,155	1,895	1,778	346	244	0	-233	0.00	0.01	
18	540.74	1,999,189	3,034	1,502	0	248	0	276	0.00	0.01	
19	540.71	1,998,810	-379	0	0	247	0	56	0.00	0.00	
20	540.49	1,996,029	-2,781	0	1,517	278	0	393	0.00	0.70	
21	540.49	1,996,029	0	0	0	307	0	307	0.11	0.20	
22	540.51	1,996,281	252	0	0	82	0	209	0.01	0.42	
23	540.54	1,996,661	380	0	0	268	0	460	0.06	0.41	
24	540.35	1,994,260	-2,401	0	2,060	277	0	1,127	0.04	0.00	
25	540.28	1,993,375	-885	16	1,373	276	0	1,187	0.05	0.76	
26	540.53	1,996,534	3,159	1,687	787	261	0	954	0.06	0.30	
27	540.58	1,997,166	632	1,865	1,312	287	0	53	0.09	0.03	
28	540.55	1,996,787	-379	1,480	1,400	174	0	-97	0.04	0.02	
29	540.70	1,998,683	1,896	1,310	0	59	0	-295	0.05	0.00	
30	540.79	1,999,821	1,138	800	0	292	0	66	0.04	0.00	
31	540.73	1,999,062	-759	800	1,043	332	0	192	0.02	0.01	
<b>Total</b>				95,658	65,553	15,640	6,905	0	5,219	1.34	5.91
<b>Mean cfs ac-ft</b>				---	2,115	505	223	0	168	---	---
				95,658	130,026	31,025	13,695	0	10,352	---	---

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 12,457 AF, San Benito: 1,238 AF.

**Table 16. San Luis Field Division Plant Data**

(in acre-feet)

**January 1997**

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/, 2/	Total Generation	SWP Generation 1/, 2/	Total Pumping	SWP Pumping 1/, 2/	Federal
	1	2,641	1,509	0	0	10,251	21
2	2,595	1,467	1,034	1,034	5,797	9	389
3	2,658	1,455	1,551	1,551	5,906	5	407
4	3,645	2,476	0	0	5,936	15	407
5	2,885	1,730	0	0	6,435	-7	407
6	2,571	1,450	1,694	1,694	5,727	-21	407
7	2,716	1,595	1,355	1,355	5,711	-22	407
8	3,024	2,342	2,950	2,950	5,686	-16	407
9	2,874	2,198	2,926	2,926	5,403	1	456
10	2,363	1,713	0	0	6,187	52	430
11	2,799	2,134	0	0	8,313	1,558	436
12	2,520	1,864	0	0	12,923	-38	438
13	2,251	1,609	0	0	12,655	-59	400
14	2,248	1,613	0	0	7,113	-37	427
15	3,399	1,150	0	0	3,691	-50	413
16	3,161	884	0	0	0	0	337
17	3,093	1,482	686	686	3,527	12	483
18	2,835	1,408	0	0	2,979	-3	491
19	2,376	1,390	0	0	0	0	489
20	3,212	1,583	3,009	3,009	0	0	552
21	2,935	1,338	0	0	0	0	608
22	2,946	1,360	0	0	0	0	162
23	2,045	244	0	0	0	0	531
24	1,105	298	4,086	-151	0	0	550
25	542	11	2,724	18	32	32	547
26	2,466	2,279	1,562	9	3,347	-83	518
27	2,382	494	2,603	-14	3,699	-45	569
28	2,428	488	2,777	-3	2,936	-15	345
29	2,436	496	0	0	2,598	-37	118
30	2,476	517	0	0	1,587	-59	579
31	2,187	931	2,068	26	1,587	-59	659
<b>Total</b>	<b>79,814</b>	<b>41,508</b>	<b>31,025</b>	<b>15,090</b>	<b>130,026</b>	<b>1,154</b>	<b>13,695</b>

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping;  
adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

**Table 17. Consolidated State-Federal Los Banos Reservoir**

Daily Operations

January 1997

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 34,560 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)	Evap. (in)	Prec. (in)
					Spill	Outlet			
Dec. 31	326.79	20,104							
1	327.59	20,477	373	288	0	100	0	0.03	0.03
2	333.61	23,401	2,924	1,649	0	175	0	0.01	0.16
3	335.08	24,147	746	801	0	425	0	0.04	0.92
4	334.25	23,725	-422	237	0	450	0	0.09	0.01
5	333.71	23,452	-273	312	0	450	1	0.05	0.33
6	332.49	22,841	-611	142	0	450	0	0.18	0.00
7	331.07	22,142	-699	98	0	450	-1	0.13	0.00
8	329.80	21,526	-616	81	0	392	1	0.03	0.00
9	328.84	21,067	-459	78	0	309	-1	0.04	0.00
10	328.07	20,703	-364	66	0	250	1	0.04	0.00
11	327.85	20,599	-104	67	0	119	-1	0.03	0.00
12	328.14	20,736	137	69	0	0	0	0.00	0.14
13	328.51	20,910	174	88	0	0	-1	0.00	0.23
14	328.54	20,925	15	66	0	58	-1	0.00	0.00
15	329.33	21,301	376	352	0	162	-1	0.19	0.60
16	329.14	21,210	-91	154	0	200	0	0.00	0.02
17	328.75	21,024	-186	106	0	200	0	0.01	0.02
18	328.29	20,806	-218	90	0	200	0	0.03	0.00
19	327.78	20,566	-240	79	0	200	0	0.00	0.00
20	327.96	20,651	85	243	0	200	0	0.01	0.02
21	328.43	20,873	222	312	0	200	0	0.06	0.14
22	329.16	21,219	346	374	0	200	1	0.04	0.27
23	330.40	21,816	597	501	0	200	0	0.04	0.17
24	330.98	22,098	282	342	0	200	0	0.06	0.00
25	334.25	23,725	1,627	1,172	0	352	1	0.00	0.57
26	338.76	26,070	2,345	1,691	0	509	1	0.06	0.48
27	338.12	25,730	-340	479	0	650	-1	0.36	0.06
28	337.07	25,177	-553	254	0	533	0	0.04	0.01
29	336.03	24,636	-541	177	0	450	0	0.05	0.00
30	334.83	24,020	-616	139	0	450	1	0.06	0.00
31	333.50	23,346	-674	110	0	450	0	0.01	0.00
<b>TOTAL</b>				3,242	10,617	0	8,984	0	1.69
<b>MEAN CFS</b>				- - -	342	0	290	- - -	- - -
<b>ACRE-FEET</b>				3,242	21,059	0	17,825	0	- - -

**Table 18. Consolidated State-Federal Little Panoche Reservoir**

Daily Operations

**January 1997**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 5,580 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Computed Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Dec 31	602.60	826	0	6	0	6	
1	Not Observed						
2	602.60	826	0	4	0	4	
3	603.50	881	55	108	0	80	
4	Not Observed			69	0	80	
5	602.80	838	-43	69	0	80	
6	602.65	829	-9	0	0	5	
7	Not Observed			4	0	5	
8	Not Observed			4	0	5	
9	Not Observed			5	0	5	
10	602.60	826	-3	4	0	5	
11	Not Observed			6	0	5	
12	Not Observed			6	0	5	
13	602.60	826	0	5	0	4	
14	Not Observed			5	0	4	
15	602.75	837	11	10	0	8	
16	Not Observed			8	0	8	
17	602.75	837	0	6	0	8	
18	Not Observed			6	0	8	
19	Not Observed			6	0	8	
20	602.60	826	-11	5	0	6	
21	Not Observed			9	0	6	
22	602.77	837	11	12	0	9	
23	602.90	844	7	21	0	17	
24	602.85	841	-3	13	0	15	
25	603.40	875	34	94	0	77	
26	604.40	938	63	232	0	200	
27	603.60	887	-51	101	0	127	
28	603.20	863	-24	40	0	52	
29	603.07	855	-8	25	0	29	
30	603.00	850	-5	18	0	21	
31	602.90	844	-6	15	0	18	
Total			18	916	0	910	---
Mean cfs			---	30	0	29	---
ac-ft			18	1,817	0	1,805	6

1/ Not available on a daily basis

**Table 19a. Governor Edmund G. Brown California Aqueduct**  
San Luis Field Division, Monthly Deliveries

(In acre-feet)

**January 1997**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					USBR	Transfer	DWR	USBR		
	No.	Structure	Mile					Recreation	Recreation		
3	13	O'Neill Forebay									
		Outlet Check No. 13	70.85	Department of Fish & Game	14			8	6		
			70.91			124	124				
			Thru 85.08	San Luis Water District	124						
				Reach 3 Subtotal:	138	124	0	8	6		
4	14	Dos Amigos Pumping Plant	86.73		79,814						
			89.03			874	874				
			Thru 94.06	San Luis Water District	874						
			89.66			1	1				
			Thru 89.67	Pacheco Water District	1						
			89.68	Panoche Water District	3	3					
			89.70	City of Dos Palos	59	59					
		Check No. 14	95.06								
			98.15			584	584				
			Thru 104.20	San Luis Water District	584						
	15		96.15			1,821	1,821				
			Thru 102.64	Panoche Water District	1,821						
			102.64	Broadview Water District	0						
			105.22			4,761	4,761				
			Thru 108.64	Westlands Water District	4,761						
		Check No.15	108.50								
				Pacheco Water District Total:	1	1	0	0	0		
				Broadview Water District Total:	0	0	0	0	0		
				City of Dos Palos Total:	59	59	0	0	0		
				SLWD Reach 4 Subtotal:	1,458	1,458	0	0	0		
				Panoche Water District Total:	1,824	1,824	0	0	0		
				SLWD Total:	1,582	1,582	0	0	0		
				Westlands WD Reach 4 Subtotal:	4,761	4,761	0	0	0		

**Table 19b. Governor Edmund G. Brown California Aqueduct**  
San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries							
	Beginning and Ending					USBR	Transfer	DWR	USBR				
	No.	Structure	Mile					Recreation	Recreation				
5	16		110.52	Westlands Water District	8,084	8,084	11,343	7,152	2,633				
			Thru 122.05										
		Check No. 16	122.07										
	17		124.18	Westlands Water District	11,343								
			Thru 132.74										
	18		133.81	Westlands Water District	7,152								
			Thru 142.61										
		Pleasant Valley Pumping Plant	143.16										
			143.16										
		Check No. 18	143.23										
				Westlands WD Reach 5 Subtotal:	29,212	29,212	0	0	0				
6	19		145.26	Westlands Water District	12,295	12,295	12,295	145	466				
			Thru 151.19										
		Check No. 19	155.64										
				Westlands WD Reach 6 Subtotal:	12,295	12,295	0	0	0				
7	20		156.34	City of Huron	46	46	5,596	145	466				
			156.40	Westlands Water District	5,596								
			Thru 163.69										
	21	Check No. 20	164.69										
			164.79	City of Avenal	145								
			167.04	Westlands Water District	466								
			Thru 171.67										
		Check No. 21	172.40		19,885								
				Reach 7 Total:	6,253	6,253	0	0	0				
				Westlands WD Total:	52,330	52,330	0	0	0				
				City of Coalinga Total:	159	159	0	0	0				
				City of Huron Total:	46	46	0	0	0				
				City of Avenal Total:	145	145	0	0	0				
				Phase I Water Total:	0	0	0	0	0				
				Total Canal Diversions:	56,160	56,146	0	8	6				

**Table 20. Consolidated State-Federal San Luis Canal 1**

Daily Operations

January 1997

United States  
Department of the Interior  
Bureau of Reclamation  
Central Valley Project

State of California  
The Resources Agency  
Department of Water Resources  
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	Evap. (in)	Prec. (in)
			Non- Project 2/	Dos Amigos Pumping Plant	SLWD 3/	PWD	WWD 4/	SJFD			
Dec 31	25,023										
1	25,523	500	0	1,331	7	20	305	759	12	0.00	0.05
2	25,874	351	13	1,308	7	37	397	842	139	0.04	0.53
3	25,401	-473	130	1,340	7	33	347	1,194	-127	0.00	0.99
4	26,071	670	51	1,838	4	33	406	994	-114	0.15	0.01
5	26,213	142	10	1,454	7	33	318	938	-96	0.02	0.38
6	26,809	596	4	1,296	9	26	399	566	0	0.08	Trace
7	27,033	224	1	1,369	4	16	486	716	-35	0.19	0.00
8	27,088	55	0	1,525	6	16	489	731	-255	0.04	0.00
9	26,549	-539	0	1,449	4	18	1,038	808	147	0.03	0.00
10	26,159	-390	0	1,191	10	20	859	303	-196	0.03	0.00
11	26,339	180	0	1,411	19	23	1,137	165	24	0.01	0.01
12	26,568	229	0	1,270	19	20	1,092	89	65	0.00	0.12
13	26,581	13	2	1,135	14	22	1,079	0	-15	0.00	0.30
14	26,457	-124	3	1,133	15	37	1,154	0	7	0.00	0.00
15	27,415	958	6	1,714	12	35	1,091	0	-99	0.17	0.62
16	27,976	561	24	1,594	28	38	1,108	0	-161	0.01	0.03
17	28,440	464	15	1,559	24	32	1,184	0	-100	0.00	0.01
18	28,720	280	11	1,429	29	39	1,138	0	-93	0.00	0.01
19	28,535	-185	12	1,198	25	48	1,133	95	-2	0.00	Trace
20	28,284	-251	18	1,619	35	44	1,112	561	-12	0.00	0.70
21	28,637	353	39	1,480	37	48	1,024	112	-120	0.11	0.20
22	28,753	116	107	1,485	38	46	1,036	306	-108	0.01	0.42
23	27,784	-969	169	1,031	37	41	1,050	461	-100	0.06	0.41
24	26,429	-1,355	36	557	32	30	1,036	189	11	0.04	0.00
25	25,015	-1,414	38	273	46	29	1,057	17	125	0.05	0.76
26	25,578	563	85	1,243	45	23	907	0	-69	0.06	0.30
27	26,104	526	150	1,201	45	23	849	64	-105	0.09	0.03
28	26,550	446	62	1,224	48	22	790	0	-201	0.04	0.02
29	27,009	459	27	1,228	50	26	849	0	-99	0.05	Trace
30	27,381	372	19	1,248	51	20	781	61	-166	0.04	0.00
31	27,647	266	10	1,103	51	22	908	54	56	0.02	0.01
Total		2,624	1,042	40,236	765	920	26,559	10,025	-1,686	1.34	5.91
Mean (cfs)		---	34	1,298	25	30	857	323	-54	---	---
Acre-feet		2,624	2,067	79,814	1,518	1,824	52,680	19,885	-3,350	---	---

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Pump In of Non-Project Water and Flood Water (2,067 AF) is included in the gain/loss on a daily average basis.

3/ Includes 0 AF AG & 1 AF M&I to Pacheco W.D. and 59 AF to the City of Dos Palos.

4/ Includes 46 AF to the City of Huron, 145 AF to the City of Avenal, 159 AF to the City of Coalinga, 0 AF

Phase I Water, and 0 AF to Broadview W.D. and 0 AF recreation water at Reach 5 to DFG.

**Table 21. San Joaquin Field Division Plant Data**

(in acre-feet)

**January 1997**

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	0	0	0	0	0	874	789	736	736
2	0	0	0	0	0	999	1,024	927	976
3	0	0	0	0	0	2,008	1,783	1,673	1,721
4	0	0	0	0	0	2,395	2,265	2,155	2,073
5	0	0	0	0	0	1,392	1,349	1,327	1,309
6	0	0	0	0	0	1,147	1,280	1,188	1,145
7	0	0	0	0	0	1,348	1,329	1,132	1,227
8	0	0	0	0	0	1,260	1,287	1,297	1,252
9	0	0	0	0	0	1,370	1,203	1,221	1,172
10	0	0	0	0	0	794	749	715	657
11	0	0	0	0	0	1,003	1,088	977	1,064
12	0	0	0	0	0	741	807	720	789
13	0	0	0	0	0	688	634	617	709
14	0	0	0	0	0	635	613	579	573
15	0	0	0	0	0	556	613	533	573
16	0	1	0	0	0	799	708	652	682
17	0	0	0	0	0	1,593	1,647	1,576	1,579
18	0	0	0	0	0	1,601	1,716	1,583	1,609
19	0	0	0	0	0	1,312	1,377	1,386	1,445
20	0	0	0	0	0	2,254	2,257	2,243	2,209
21	0	0	0	0	0	2,150	2,161	2,080	1,991
22	0	0	0	0	0	1,679	1,556	1,546	1,418
23	0	0	0	0	0	2,152	2,096	2,026	1,964
24	0	0	0	0	0	1,639	1,698	1,616	1,609
25	0	0	0	0	0	695	752	664	706
26	0	0	0	0	0	424	466	407	436
27	0	0	0	0	0	895	850	734	655
28	0	0	0	0	0	1,260	1,103	1,054	981
29	0	0	0	0	0	1,260	1,215	1,118	1,121
30	0	0	0	0	0	1,260	1,160	1,093	1,091
31	0	0	0	0	0	1,260	1,389	1,230	1,200
Total	0	1	0	0	0	39,443	38,964	36,805	36,672

**Table 22a. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

**January 1997**

Reach No.	Operating Pool		Turnout	Total Diversions	Deliveries					
	Beginning and Ending				Entitle-ment	Inter-ruptible Ent.	Transfer	USBR	Local Out	
	No.	Structure	Mile							
7	21	Check No. 21	172.40	19,885						
8C	22			Empire West Side Irrig. Dist.						
				TL - A	0					
				County of Kings						
				TL - A	0					
				TLBWS D TL-A	0					
				175.18	DRWD - 1	2				
				180.64	TLBWS D - C	0				
				180.65	DRWD - 1A	0				
				Dudley Ridge Water Dist.						
				182.99	DRWD - 2	2				
8D				183.00	TLB WSD TL - B	32				
				184.63	Coastal Branch	0				
31A				Dudley Ridge Water Dist.						
				184.78	DRWD - 3	0				
8D				Dudley Ridge Total:		4				
				Tulare Lake Basin WSD Total:		32	4	0	0	
				Check No. 22	184.82		32	0	0	
9	23			Kern County Water Agency						
				189.69	Lost Hills Water Dist. - 1	0				
				191.18	Lost Hills Water Dist. - 2	0				
				194.22	Lost Hills Water Dist. - 3	0				
				196.40	Berrenda Mesa - 2	0				
				196.75	Lost Hills Water Dist. - 4	0				
				K.C.W.A. Reach 9 Subtotal:		0	0	0	0	
				Check No. 23	197.05					
				201.24	Kern County Water Agency					
					Lost Hills Water Dist. - 7	36				
10A	24			202.05	Kern County Water Agency					
					Lost Hills Water Dist. - 5	4				
				204.69	Kern County Water Agency					
					Lost Hills Water Dist. - 6	0				
				205.26	Kern County Water Agency					
					Lost Hills Water Dist. - 8	0				
				Check No. 24	207.94					
				209.71	Kern County Water Agency					
					Belridge Water Storage Dist. - 1A	5				
				209.78	Kern National Wildlife Refuge					
					USBR BV-1B	0				
				209.80	Kern County Water Agency					
					Buena Vista WSD 1B	0				
					KCWA Semitropic WSD	745				
					KCWA Semitropic WSD Penstocks	0				
					USBR Total:	0				
					K.C.W.A. Reach 10A Subtotal:	790	0	0	0	
							790	0	0	

**Table 22b. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Inter-ruptible Ent.	Transfer				
	No.	Structure	Mile									
11B	25		210.75	Kern County Water Agency Belridge - 2	0	258	87					
			214.11	Kern County Water Agency Belridge - 3	0							
			216.62	Kern County Water Agency Belridge - 4	0							
			217.13	Kern County Water Agency Belridge - 5	258							
				Kern County Water Agency Belridge - 5D	87							
		Check No. 25	217.79									
				K.C.W.A. Reach 11B Subtotal:	345	345	0	0	0	0		
12D	26		219.58	Kern County Water Agency Belridge - 6	0	640	552	114	1,494			
		Check No. 26	224.92									
12E	27		230.37	Kern County Water Agency Buena Vista - 6	0							
			Check No. 27	231.73								
			235.75	Kern County Water Agency Buena Vista - 2	0							
			238.04	Kern County WA C.V.C.	2,686							
				D.R.W.D. C.V.C.	114							
				Tulare Co.	0							
				Lower Tule River	0							
				Fresno Co.	0							
	28			Pixley ID	0							
				Hacienda								
				DWR Wells	0							
		Check No. 28	238.11									
			1/ Arvin Edison Total:	0	0	0	0	0	0			
				Reach 12E Subtotal:	2,800	640	666	0	0	1,494		
13B	29		241.02	Kern River Intertie (inflow)	25,566							
			242.85	KCWA Buena Vista WSD - 7	0							
				KCWA Buena Vista WSD - 5	0							
			243.09	Kern County Water Agency Buena Vista - 3	0							
		Check No. 29	244.54	Buena Vista WSD	0							
	30		249.85	Kern County Water Agency Buena Vista - 4	0							
				Buena Vista Pumping Plant	39,443							
				K.C.W.A. Reach 13B Subtotal:	0	0	0	0	0	0		
14A	31		254.47	Kern County Water Agency West Kern - 2	0	2	2					
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	2							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

**Table 22c. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Inter-ruptible Ent.	Transfer	USBR	Local Out		
	No.	Structure	Mile									
14A	31	Check No. 31	256.14			21	99	0	0	0		
	32		258.61	Kern County Water Agency Wheeler Ridge-Maricopa - 3	21							
			260.44	Kern County Water Agency Wheeler Ridge-Maricopa - 4	99							
			Check No. 32	261.72								
				KCWA Reach 14A Subtotal:	122	122						
14B	33		264.42	Kern County Water Agency Wheeler Ridge-Maricopa - 5	353	353	272	0	0	0		
			266.91	Kern County Water Agency Wheeler Ridge-Maricopa - 6	0							
			Check No. 33	267.36								
	34		270.24	Kern County Water Agency Wheeler Ridge-Maricopa - 7	272							
			Check No. 34	271.27								
				Reach 14B Total:	625	625						
14C	35		272.39	Kern County Water Agency Wheeler Ridge-Maricopa - 8	514	514	216	0	0	0		
			276.09	Kern County Water Agency Wheeler Ridge-Maricopa - 9	216							
				Reach 14C Total:	730	730						
15A	36		278.13		38,964	742	742	0	0	0		
			279.02	Kern County Water Agency Wheeler Ridge-Maricopa - 9A	0							
			280.06	Kern County Water Agency Wheeler Ridge-Maricopa - 10	742							
				Reach 15-A Total:	742	742						
	Teerink Pumping Plant		280.36		36,805							
16A	37		282.06	Kern County Water Agency Wheeler Ridge-Maricopa - 11	0	1	1	0	0	0		
			Check No. 37	283.95								
			285.01	Kern County Water Agency Wheeler Ridge-Maricopa - 12	0							
			286.39	Kern County Water Agency Wheeler Ridge-Maricopa - 13A	1							
			287.06	Kern County Water Agency Wheeler Ridge-Maricopa - 13	0							
	Chrisman Pumping Plant		Check No. 38	287.09								
	39		287.62	Kern County Water Agency Wheeler Ridge-Maricopa - 13B	0							
			Check No. 39	290.21								
17E	40		291.26	Kern County Water Agency Wheeler Ridge-Maricopa - 14	335	335	104	0	0	0		
			293.07	Kern County Water Agency Wheeler Ridge-Maricopa - 15	104							
				KCWA TC-15	0							
				K.C.W.A. Reach 16A Subtotal:	440	440						
	Edmonston Pumping Plant		293.45		36,672							

**Table 23. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Inter-ruptible Ent.	Transfer	USBR	Local Out		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		0	12	0	0	0	0		
		Las Perillas Pumping Plant	1.16		0							
	C-2		3.79		0							
		Badger Hill Pumping Plant	4.27		1							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake W.A. (Devil's Den W.D. #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
			13.30	Kern County Water Agency Berrenda Mesa - 3	0							
	C-6		14.83	Kern County Water Agency Berrenda Mesa - DD	0							
				Kern County Water Agency Berrenda Mesa - PO	12							
		Devil's Den Pumping Plant	14.86		0							
				K.C.W.A. Reach 31A Subtotal:	12	12	0	0	0	0		
				K.C.W.A. Total:	8,740	5,086	666	0	0	2,988		
33A	C-7	Bluestone Pumping Plant	19.05		0	12	0	0	0	0		
	C-8	Polonio Pass Pumping Plant	26.54		0							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant	0							
33B	C-10		38.23	SLOCFC & WCD (Shandon)	0							
		Tank Site 2	58.55		0							
34	C-11		69.31	SLOCFC & WCD (Chorro Valley)	0							
		Energy Dissipater	78.12		0							
35	C-12		85.86	SLOCFC & WCD (Lopez)	0							
				SLOCFC & WCD Total:	0							
38			102.70	SBCFC & WCD (Guadalupe)	0							
			107.43	SBCFC & WCD (Santa Maria)	0							
			109.20	SBCFC & WCD (Southern CA)	0							
			115.37	SBCFC & WCD (Tank Site 5)	0							
		Tank Site 5	115.42	SBCFC & WCD Total:	0							

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 1997**

Date	West Branch						East Branch				
	Oso Pumping Plant	Warne Powerplant	Castaic Powerplant				Alamo Powerplant 2/		Pearblossom Pumping Plant	Mojave Siphon Powerplant	Devil Canyon Powerplant
			Generation		Total	SWP	1/	Pumpback			
1	668	740	3,538		612		1,326		0	0	594
2	959	1,080	5,215		612		2,392		0	0	598
3	1,679	1,336	4,961		612		3,773		0	0	274
4	1,815	1,914	774		612		2,490		0	0	0
5	1,255	950	1,594		612		1,207		0	0	0
6	948	1,828	2,009		392		1,577		0	0	0
7	1,089	490	2,215		392		84		0	0	0
8	606	0	2,384		392		2,074		0	0	149
9	431	462	2,526		392		926		0	0	181
10	411	0	3,190		392		44		0	0	355
11	0	197	817		391		2,375		0	0	477
12	172	0	1,715		391		4,363		0	0	451
13	63	270	8,147		1,104		2,676		0	0	173
14	208	1,248	4,893		1,104		4,685		0	0	174
15	499	549	7,756		1,104		4,292		0	0	172
16	666	732	3,897		1,104		4,309		0	0	171
17	1,611	1,686	4,939		1,104		4,019		0	0	311
18	1,524	1,694	1,236		1,104		2,398		0	0	471
19	832	801	1,081		1,103		4,393		0	0	418
20	1,533	1,818	4,673		1,475		1,376		0	0	122
21	1,303	803	4,961		1,475		1,751		0	0	0
22	1,164	1,257	5,393		1,475		1,856		0	0	0
23	1,702	1,519	4,908		1,475		1,995		0	0	0
24	1,517	1,488	2,506		1,474		3,178		0	0	0
25	677	1,521	2,352		1,474		255		0	0	0
26	454	1,261	1,908		1,474		3,724		0	0	0
27	647	824	5,705		613		2,548		0	0	0
28	913	802	2,672		613		4,065		0	0	0
29	1,055	698	2,191		612		3,790		0	0	0
30	1,067	865	4,510		612		1,202		0	0	0
31	1,217	954	4,240		612		3,110		0	0	0
Total	28,685	29,787	108,906		26,913		78,253		0	0	5,091

1/ Scheduled amounts of water credited to SWP in Elderberry Forebay, subject to change.

2/ Not shown is 7,951 acre-feet around Alamo through Cottonwood Chutes.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Dec 31	2575.51	166,706								
1	2574.22	165,067	-1,639	1,326	740	102	3,538	0	99	-170
2	2572.93	163,438	-1,629	2,392	1,080	143	5,215	0	99	70
3	2572.96	163,476	38	3,773	1,336	231	4,961	0	99	-242
4	2575.82	167,102	3,626	2,490	1,914	194	774	0	198	0
5	2576.35	167,780	678	1,207	950	150	1,594	0	99	64
6	2577.37	169,089	1,309	1,577	1,828	130	2,009	0	99	-118
7	2576.00	167,332	-1,757	84	490	81	2,215	0	99	-98
8	2575.80	167,076	-256	2,074	0	72	2,384	0	99	81
9	2575.28	166,413	-663	926	462	70	2,526	0	99	504
10	2572.69	163,136	-3,277	44	0	66	3,190	0	69	-128
11	2573.78	164,510	1,374	2,375	197	61	817	0	69	-373
12	2575.87	167,166	2,656	4,363	0	62	1,715	0	69	15
13	2571.50	161,645	-5,521	2,676	270	66	8,147	0	69	-317
14	2572.13	162,433	788	4,685	1,248	62	4,893	0	69	-245
15	2569.61	159,295	-3,138	4,292	549	88	7,756	0	69	-242
16	2570.46	160,349	1,054	4,309	732	102	3,897	0	149	-43
17	2570.95	160,959	610	4,019	1,686	86	4,939	0	149	-93
18	2573.23	163,816	2,857	2,398	1,694	75	1,236	0	99	25
19	2576.49	167,959	4,143	4,393	801	71	1,081	0	69	28
20	2575.19	166,299	-1,660	1,376	1,818	87	4,673	0	69	-199
21	2573.42	164,056	-2,243	1,751	803	88	4,961	0	69	145
22	2571.67	161,858	-2,198	1,856	1,257	108	5,393	0	69	43
23	2570.65	160,585	-1,273	1,995	1,519	370	4,908	0	69	-180
24	2572.19	162,509	1,924	3,178	1,488	331	2,506	0	69	-498
25	2571.77	161,983	-526	255	1,521	312	2,352	0	149	-113
26	2574.70	165,676	3,693	3,724	1,261	681	1,908	0	150	85
27	2572.83	163,312	-2,364	2,548	824	474	5,705	0	188	-317
28	2574.47	165,384	2,072	4,065	802	313	2,672	0	398	-38
29	2576.12	167,485	2,101	3,790	698	236	2,191	0	398	-34
30	2574.12	164,940	-2,545	1,202	865	193	4,510	0	299	4
31	2573.99	164,776	-164	3,110	954	166	4,240	0	199	45
Total				-1,930	78,253	29,787	5,271	108,906	0	3,996 -2,339

**Table 26. Elderberry Forebay**

## Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

January 1997

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)	
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake			
							Natural	Project		
Dec 31	1509.30	18,916								
1	1514.90	21,120	2,204	3,538	33	1,326	33	0	-8	
2	1521.90	24,057	2,937	5,215	44	2,392	44	0	114	
3	1515.42	21,331	-2,726	4,961	71	3,773	71	3,813	-101	
4	1511.24	19,664	-1,667	774	70	2,490	70	0	49	
5	1512.03	19,974	310	1,594	53	1,207	53	0	-77	
6	1513.10	20,397	423	2,009	38	1,577	38	0	-9	
7	1508.73	18,699	-1,698	2,215	33	84	33	3,671	-158	
8	1509.39	18,950	251	2,384	31	2,074	31	0	-59	
9	1513.47	20,544	1,594	2,526	28	926	28	0	-6	
10	1518.53	22,618	2,074	3,190	26	44	26	987	-85	
11	1514.72	21,047	-1,571	817	26	2,375	26	0	-13	
12	1508.12	18,468	-2,579	1,715	27	4,363	27	0	69	
13	1522.33	24,243	5,775	8,147	36	2,676	36	0	304	
14	1517.01	21,984	-2,259	4,893	57	4,685	57	2,372	-95	
15	1525.51	25,642	3,658	7,756	110	4,292	110	0	194	
16	1524.73	25,296	-346	3,897	96	4,309	96	0	66	
17	1519.54	23,045	-2,251	4,939	74	4,019	74	2,926	-245	
18	1513.65	20,616	-2,429	1,236	59	2,398	59	1,179	-88	
19	1505.04	17,324	-3,292	1,081	59	4,393	59	0	20	
20	1514.07	20,785	3,461	4,673	55	1,376	55	0	164	
21	1512.16	20,025	-760	4,961	43	1,751	43	3,907	-63	
22	1520.97	23,656	3,631	5,393	45	1,856	45	0	94	
23	1521.10	23,711	55	4,908	61	1,995	61	2,835	-23	
24	1511.37	19,715	-3,996	2,506	56	3,178	56	3,338	14	
25	1517.02	21,988	2,273	2,352	98	255	98	0	176	
26	1513.26	20,460	-1,528	1,908	202	3,724	202	0	288	
27	1521.41	23,845	3,385	5,705	231	2,548	231	0	228	
28	1514.40	20,917	-2,928	2,672	231	4,065	231	924	-611	
29	1510.59	19,412	-1,505	2,191	168	3,790	168	0	94	
30	1517.45	22,167	2,755	4,510	132	1,202	132	342	-211	
31	1515.73	21,457	-710	4,240	105	3,110	105	1,813	-27	
Total				2,541	108,906	2,398	78,253	2,398	28,107	-5

**Table 27. Castaic Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow		Computed Losses (-) Gains (+)	
				From Elderberry Forebay		Natural	Deliveries	Released To Castaic Lagoon		
				Natural	Project					
Dec 31	1498.65	288,359								
1	1498.57	288,192	-167	33	0	28	347	0	119	
2	1498.44	287,921	-271	44	0	34	365	0	16	
3	1500.21	291,627	3,706	71	3,813	127	320	0	15	
4	1500.07	291,333	-294	70	0	63	331	0	-96	
5	1499.97	291,123	-210	53	0	58	267	0	-54	
6	1499.78	290,724	-399	38	0	44	311	0	-170	
7	1501.45	294,241	3,517	33	3,671	36	344	0	121	
8	1501.30	293,924	-317	31	0	31	339	0	-40	
9	1501.15	293,607	-317	28	0	28	321	0	-52	
10	1501.53	294,410	803	26	987	23	345	0	112	
11	1501.33	293,987	-423	26	0	21	406	0	-64	
12	1501.22	293,755	-232	27	0	25	323	0	39	
13	1501.21	293,734	-21	36	0	39	26	0	-70	
14	1502.61	296,698	2,964	57	2,372	31	37	0	541	
15	1502.44	296,337	-361	110	0	32	545	0	42	
16	1502.26	295,956	-381	96	0	36	375	0	-138	
17	1503.53	298,656	2,700	74	2,926	32	616	0	284	
18	1503.81	299,253	597	59	1,179	26	621	0	-46	
19	1503.53	298,656	-597	59	0	23	663	0	-16	
20	1503.25	298,059	-597	55	0	31	673	0	-10	
21	1504.70	301,156	3,097	43	3,907	34	703	0	-184	
22	1504.47	300,664	-492	45	0	57	725	0	131	
23	1505.62	303,131	2,467	61	2,835	219	690	0	42	
24	1507.06	306,237	3,106	56	3,338	120	753	0	345	
25	1506.94	305,977	-260	98	0	195	757	0	204	
26	1506.97	306,042	65	202	0	721	736	0	-122	
27	1506.76	305,588	-454	231	0	331	700	0	-316	
28	1507.17	306,475	887	231	924	175	835	0	392	
29	1506.81	305,696	-779	168	0	120	836	0	-231	
30	1506.80	305,675	-21	132	342	89	722	0	138	
31	1507.33	306,821	1,146	105	1,813	74	747	0	-99	
Total				18,462	2,398	28,107	2,903	15,779	0	833

**Table 28. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool		Turnout	Total Diversions	Deliveries					
	Beginning and Ending				Entitle-ment	Rec.	1996 CA - OV Ent.	Local In	14 B M & I	
	No.	Structure	Mile							
29A	42	Oso Pumping Plant	1.49		28,685					
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub					
29G		Warne Power Plant	14.07		29,787					
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	0					
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0					
29J	W4	Castaic Power Plant	25.82	( 78,253 AF pumpback )	108,906					
		Elderberry Forebay								
		Forebay Dam	28.12							
		Castaic Lake		Calif. State Park Castaic Lake Recreation	4					
30 1/	W5	Castaic Dam	31.47							
		Castaic Lake Outlet	31.55	MWD - 78"	7,851					
				MWD - 132"	0					
				CLWA - T1	538					
				Castaic Lake Water Agency	341					
				Ventura County Flood Control District	Stub					
				L.A. Co. Parks & Recreation	0					
				Releases to Lagoon	0					
				Reach 30 Subtotal:	8,734	8,730	4	0	0	
	W6	Castaic Lagoon		Recreation to Lagoon	86		86			
		Castaic Lagoon Outlet	31.87		0					

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

**Table 29. Silverwood Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

**January 1997**

Date	Water Surface Elev. (in feet)	Storage	Storage Change	Inflow			Outflow					Computed Losses (-) Gains (+)	Las Flores Ranch Exchange 1/		
				Project		Natural Stream Flow	Project			Del. To Mojave W.A.	Natural To Mojave River				
				Mojave Siphon Power-Plant	Mojave Bypass Flume		Delivered to CLAWA	Rec.	San Bernardino Tunnel 2/						
Dec 31	3268.14	14,977													
1	3266.81	14,425	-552	0	9	31	0	0	594	0	0	2	10		
2	3265.60	13,931	-494	0	7	33	0	0	598	0	0	64	10		
3	3265.21	13,774	-157	0	9	264	4	0	274	0	252	100	10		
4	3264.56	13,513	-261	0	9	119	0	0	0	0	474	85	10		
5	3264.24	13,385	-128	0	8	87	6	0	0	0	202	-15	10		
6	3263.97	13,278	-107	0	8	67	3	0	0	0	202	23	10		
7	3263.73	13,183	-95	0	10	56	0	0	0	0	202	41	28		
8	3263.55	13,112	-71	0	12	50	0	0	149	0	79	95	40		
9	3263.51	13,097	-15	0	13	45	4	0	181	0	0	112	40		
10	3262.90	12,857	-240	0	13	41	3	1	355	0	0	65	40		
11	3262.08	12,539	-318	0	15	38	3	0	477	0	0	109	40		
12	3261.26	12,224	-315	0	16	64	3	0	451	0	0	59	40		
13	3261.47	12,304	80	0	14	107	3	0	173	0	0	135	40		
14	3261.68	12,385	81	0	14	95	3	0	174	0	0	149	40		
15	3261.49	12,312	-73	0	11	109	2	1	172	0	133	115	40		
16	3261.10	12,163	-149	0	13	105	0	0	171	0	198	102	40		
17	3260.45	11,916	-247	0	12	87	4	0	311	0	198	167	40		
18	3259.07	11,399	-517	0	11	82	5	0	471	0	186	52	40		
19	3258.19	11,075	-324	0	9	76	6	0	418	0	98	113	40		
20	3258.54	11,203	128	0	10	115	3	0	122	0	41	169	40		
21	3258.53	11,200	-3	0	12	124	1	0	0	0	0	-138	24		
22	3258.56	11,211	11	0	11	132	2	0	0	0	0	-130	10		
23	3258.99	11,370	159	0	7	339	2	0	0	0	126	-59	4		
24	3258.71	11,266	-104	0	1	234	3	0	0	0	201	-135	0		
25	3258.97	11,362	96	0	1	410	2	0	0	0	299	-14	0		
26	3259.06	11,396	34	0	1	1,522	2	0	0	0	1,292	-195	0		
27	3259.20	11,448	52	0	1	474	1	0	0	0	369	-53	0		
28	3259.77	11,660	212	0	1	280	2	0	0	0	0	-67	0		
29	3260.09	11,780	120	0	1	192	2	0	0	0	0	-71	0		
30	3261.06	12,147	367	0	224	157	1	0	0	0	0	-13	0		
31	3261.44	12,293	146	0	2	139	2	0	0	0	0	7	0		
Total				-2,684	0	485	5,674	72	2	5,091	0	4,552	874	646	

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

2/ 968 AF added to D.C.P.P. total. AVM operating erratically.

**Table 30. Lake Perris**

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

**January 1997**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow	Outflow	Computed Losses (-) Gains (+)
Dec 31	1587.15	124,898				
1	1587.16	124,921	23	0	11	34
2	1587.20	125,012	91	0	11	102
3	1587.20	125,012	0	0	65	65
4	1587.17	124,944	-68	0	10	-58
5	1587.17	124,944	0	0	11	11
6	1587.17	124,944	0	0	13	13
7	1587.09	124,761	-183	0	11	-172
8	1587.08	124,738	-23	0	10	-13
9	1587.07	124,715	-23	0	11	-12
10	1587.04	124,647	-68	0	10	-58
11	1587.04	124,647	0	0	12	12
12	1587.12	124,829	182	0	11	193
13	1587.15	124,898	69	0	12	81
14	1587.15	124,898	0	0	11	11
15	1587.17	124,944	46	0	12	58
16	1587.16	124,921	-23	0	12	-11
17	1587.15	124,898	-23	0	11	-12
18	1587.12	124,829	-69	0	11	-58
19	1587.12	124,829	0	0	12	12
20	1587.09	124,761	-68	0	11	-57
21	1587.09	124,761	0	0	12	12
22	1587.08	124,738	-23	0	11	-12
23	1587.11	124,807	69	0	11	80
24	1587.11	124,807	0	0	10	10
25	1587.12	124,829	22	0	11	33
26	1587.15	124,898	69	0	100	169
27	1587.13	124,852	-46	0	105	59
28	1587.08	124,738	-114	0	110	-4
29	1587.03	124,624	-114	0	101	-13
30	1586.98	124,510	-114	0	119	5
31	1586.92	124,374	-136	0	89	-47
Total			-524	0	957	433

**Table 31a. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool		Turnout	Total Diver-sions	Deliveries					
	Beginning and Ending				Entitle-ment	Rec.	Transfer 1/	Inter-ruptible Ent.	Transfer Local Out	
	No.	Structure	Mile							
17E	40	Edmonston Pumping Plant	293.45				36,672			
	41		298.65	Kern County Water Agency Tej.-Cas			Stub			
17F		Check No. 41	303.41							
18A	42	Check No. 42	304.99							
19	43	Alamo Powerplant	305.73	(includes 7,951 AF flow down Cottonwood Chutes)			7,951			
		Check No. 43	309.70							
	44		311.84	LADWP Connection			0			
			313.50	AVEK 245th Street West			0			
	Check No. 44		314.81							
	45		314.93	AVEK 235th Street West			2			
			315.57	Avek 225th Street West			0			
	Check No. 45		319.74							
	46		323.19	Antelope Valley-East Kern WA Fairmont			349			
		Check No. 46	323.84							
				Reach 19 Total:			351			
20A	47	Check No. 47	326.77							
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon			17			
			329.65	Antelope Valley-East Kern WA 120th Street West			Re-moved			
		Check No. 48	330.82							
	49	Check No. 49	335.93							
20B	50		336.73	AVEK WA - Quartz hill (Wheeled for Palmdale WD)			8			
				Antelope Valley-East Kern WA			1,394			
	Check No. 50		341.51							
	51	Check No. 51	342.07							
	52		342.80	Antelope Valley-East Kern WA 30th Street West			Not in Use			
		Check No. 52	343.74							
	53		346.98	PWD Palmdale			1,308			
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant			0			
21	Check No. 53		348.17							
	54	Check No. 54	350.25							
	55	Check No. 55	352.70							
22A	56	Check No. 56	354.76							
			354.97	Littlerock Creek I.D.			0			
	57	Check No. 57	356.93							
22B	58		357.72	Antelope Valley-East Kern WA 96th Street East			1			
			359.82	Antelope Valley-East Kern WA East Side Treatment Plant			172			

1/ Transferred from Mojave Water Agency to A.V.E.K.

**Table 31b. Governor Edmund G. Brown California Aqueduct**

Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

**January 1997**

Reach No.	Operating Pool		Turnout	Total Diversions	Deliveries								
	Beginning and Ending				Entitlement	Recreation	Transfer In 1/	Inter-ruptible Ent.	Transfer Local Out				
	No.	Structure	Mile										
22B	58	Pearblossom Pumping Plant	360.61		3,948	891	72	2	646				
	59	Check No. 59	366.09										
	60	Check No. 60	373.94										
	61	Check No. 61	379.00										
	62	Check No. 62	384.26										
	63	Check No. 63	389.50										
	64	Check No. 64	395.10										
	65	Check No. 65	400.32										
	66		401.10	Mojave Water Agency	891								
				Morongo 24" and 42"									
23	Check No. 66	403.41		Mojave Water Agency	0								
	Mojave Siphon	405.48		Hesperia									
24	Mojave Siphon Powerplant	405.65											
	Silverwood Lake	407.65		Crestline Lake Arrowhead Water Agency	72								
25				Calif. State Park									
San Bernardino Tunnel	411.46		Silverwood Agency (Rec.)	2									
26A	Devil Canyon Powerplant	412.73			5,091								
					0								
28G	Devil Canyon Afterbay Control Structures	412.88		MWD-SC Rialto	55	2,673	1,620	114	55				
				Desert Water Agency (MWD Wheeling Exchange)	7,059								
				San Gabriel Valley Water District	2,173								
				Coachella Valley W.D. (MWD Wheeling Exchange)	4,279								
				San Bernardino Valley Water District	169								
				MWD (SBVMWD Exchange)	0								
28H	Santa Ana Valley Pipeline	425.46				2,173	55	5	4,386				
28J		433.06		MWD-SC Box Springs	0								
		440.05		MWD-SC Perris Bypass Pipeline	0								
28J	Lake Perris	442.00		MWD-SC 18"	0								
		443.44		MWD-SC 54"	0								
				MWD-SC 78"	0								
				Calif. State Park									
				Lake Perris Recreation	5								
				MWD Total:	19,244	12,144	0	0	0				
									7,100				

1/ Reverse flow for January delivered at 26A according to the Cooperative Interchange Agreement between DWR, SBVMWD and MWDSC.

**Table 32. Water Quality At Selected SWP Locations**

January 1997

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachpi Afterbay (Check 41)	
Alkalinity	mg/l	27	68	41	40	44	61	32	60	78
Arsenic	mg/l	<0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.002	<0.001
Boron	mg/l	<0.1	0.2	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1
Bromide	mg/l	NR	0.01	0.04	0.04	0.06	NR	NR	0.19	0.10
Calcium	mg/l	6	9	11	11	12	16	8	16	20
Carbon - Total Organic	mg/l	NR	15	5	5	5	NR	NR	4	4
Chloride	mg/l	1	10	18	18	25	28	4	62	28
Chromium	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride	mg/l	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hardness	mg/l	23	52	48	48	54	81	28	81	83
Iron	mg/l	0.024	0.155	0.028	0.033	0.036	0.018	0.039	0.019	0.008
Lead	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesium	mg/l	2	7	5	5	6	10	2	10	8
Manganese	mg/l	<0.005	0.025	0.021	0.027	0.012	<0.005	<0.005	<0.005	0.210
Nitrate + Nitrite	mg/l	0.04	0.15	0.72	NR	NR	NR	NR	0.92	0.64
Phosphorus-Ortho	mg/l	<0.01	0.12	0.09	NR	NR	NR	NR	0.08	<0.01
Phosphorus-Total	mg/l	0.18	0.30	0.14	NR	NR	NR	NR	0.08	0.06
Selenium	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	mg/l	2	18	17	18	22	30	7	44	25
Specific Conductance	µS/cm	60	186	190	196	228	315	89	408	300
Sulfate	mg/l	2	9	17	21	21	44	5	29	22
Total Dissolved Solids	mg/l	40	116	106	115	126	175	66	217	167
Trihalomethane										
Formation Potential	µg/l	NR	1448	558	686	569	NR	540	414	348
Turbidity	µg/l	54	68	18	44	17	22	19	NR	NR
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

**Table 33. Water Quality At Selected Delta Stations**

**January 1997**

Date	Tides		Flow In CFS			Electrical Conductivity in milliSiemens								Cl in mg/l		
	(Antioch) Daily Mean		Net Delta Outflow Index		Rio Vista	Antioch	Chippis Island		Emmaton		Jersey Point		Clifton Court	Cache Slough	Costa Canal	Delta Mendota Canal
	Hi	Half	md	30dm	md	md	md	28dm	md	14dm	md	14dm	md	md	md	md
1	4.73	3.00	232,883c	111,129	188,979	0.19	0.12	0.00	N.R.	N.R.	0.21	0.20	0.18	N.R.	72	27
2	4.55	3.25	355,002c	122,677	290,856	N.R.	0.11	0.00	N.R.	N.R.	0.20	0.20	0.19	N.R.	69	32
3	4.96	3.93	584,513c	141,856	496,649	0.16	0.08	0.00	N.R.	N.R.	0.18	0.20	0.20	N.R.	64	35
4	5.08	4.08	513,090c	158,621	441,110	0.15	0.07	0.00	N.R.	N.R.	0.16	0.20	0.20	1	66	37
5	5.40	4.10	522,083c	148,923	439,195	0.15	0.06	0.00	N.R.	N.R.	0.17	0.19	0.18	7	59	30
6	4.87	3.38	442,331c	162,385	355,225	0.17	0.09	0.00	N.R.	N.R.	0.19	0.19	0.13	18	61	17
7	5.00	3.13	358,087c	172,955	281,624	0.17	0.08	0.00	N.R.	N.R.	0.19	0.19	0.14	24	58	18
8	5.21	3.19	329,333c	182,583	257,379	0.17	0.09	0.00	N.R.	N.R.	0.17	0.19	0.13	10	55	17
9	5.24	3.17	303,899c	191,349	238,397	0.16	N.R.	0.00	N.R.	N.R.	0.17	0.19	0.14	5	60	19
10	5.13	3.15	273,905c	198,723	210,652	0.15	N.R.	0.00	N.R.	N.R.	0.16	0.19	0.14	19	58	21
11	4.98	3.16	245,102c	204,925	186,206	0.15	N.R.	0.00	N.R.	N.R.	0.16	0.18	0.14	27	77	20
12	4.52	3.02	220,293c	209,466	167,976	0.14	N.R.	0.00	N.R.	N.R.	0.16	0.18	0.15	60	72	21
13	4.22	2.01	201,508c	212,444	149,789	0.13	N.R.	0.00	N.R.	N.R.	0.13	0.18	0.17	63	72	24
14	3.81	2.05	183,648c	214,390	135,562	0.14	N.R.	0.00	0.11	N.R.	0.12	0.17	0.18	85	55	24
15	3.76	1.84	171,320c	216,110	126,084	0.14	0.11	0.00	0.11	N.R.	0.12	0.16	0.18	92	49	25
16	3.71	1.78	164,931c	217,807	119,472	0.15	0.1	0.00	N.R.	N.R.	0.14	0.16	0.18	89	52	24
17	3.51	1.57	159,097c	219,740	113,171	0.16	0.11	0.00	0.12	N.R.	0.14	0.16	0.17	81	49	23
18	3.54	1.59	151,493c	221,853	106,308	0.17	0.09	0.00	0.12	N.R.	0.15	0.16	0.17	88	52	N.R.
19	3.87	1.90	144,343c	223,953	98,717	0.17	N.R.	0.00	0.13	N.R.	0.14	0.15	0.17	89	52	N.R.
20	4.27	2.28	137,438c	225,991	91,788	0.17	N.R.	0.00	0.13	N.R.	0.14	0.15	0.17	97	55	N.R.
21	4.17	2.30	131,715c	227,430	85,275	0.17	N.R.	0.00	0.14	N.R.	0.15	0.15	0.17	92	57	N.R.
22	4.65	2.66	127,486c	228,262	81,428	0.17	0.07	0.00	0.14	N.R.	0.15	0.15	0.18	48e	57	N.R.
23	4.39	2.67	157,585c	230,004	97,873	0.17	0.10	0.00	0.14	N.R.	0.15	0.14	0.18	N.R.	51	N.R.
24	4.41	2.69	219,809c	233,813	147,630	0.17	0.06	0.00	0.12	N.R.	0.15	0.14	0.19	0	55	N.R.
25	5.03	3.51	231,396c	238,180	162,190	0.17	N.R.	0.00	0.12	N.R.	0.15	0.14	0.20	N.R.	54	N.R.
26	4.86	3.63	245,695c	243,449	176,465	0.18	N.R.	0.00	N.R.	N.R.	0.15	0.14	0.20	N.R.	49	N.R.
27	4.02	2.99	273,933c	249,609	193,951	0.19	N.R.	0.00	N.R.	N.R.	0.16	0.14	0.21	8	38	N.R.
28	3.77	2.69	265,350c	255,001	196,458	0.20	N.R.	0.00	N.R.	N.R.	0.17	0.15	0.20	28	40	N.R.
29	3.63	2.46	260,599c	259,889	192,789	0.19	0.13e	0.00	N.R.	N.R.	0.18	0.15	0.19	43	45	N.R.
30	3.58	2.19	257,952c	262,193	192,311	0.20	0.15	0.00	N.R.	N.R.	0.18	0.15	0.19	68	50	N.R.
31	3.76	2.19	245,723c	262,621	181,770	0.19	0.15	0.00	N.R.	N.R.	0.17	0.16	0.18	78	48	N.R.

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

c = Excess Delta conditions.

f = Excess Delta conditions with fish concerns.

s = Balanced water conditions with storage withdrawals.

b = Balanced water conditions with no storage withdrawals.

r = Excess delta conditions with export/inflow ratio concerns.

**Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP**

**January 1997**

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	September 18, 1996	None Detected	
California Aqueduct At Banks Delta Pumping Plant	September 18, 1996	2,4, -D	0.33
Delta Mendota Canal At McCabe Road	September 18, 1996	2,4, -D	0.29
California Aqueduct Near Kettleman City (Check 21)	September 18, 1996	Simazine 2,4, -D	0.13 0.15
California Aqueduct At Tehachapi Afterbay (Check 41)	September 18, 1996	Simazine 2,4, -D	0.02 0.33
Devil Canyon Power Plant At Entrance To Santa Ana Pipeline	September 18, 1996	Simazine 2,4, -D	0.05 0.15

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

**Table 35. Oroville and Delta Field Divisions Energy Data**

(in kWh)	January 1997							
Date	Oroville Thermalito Complex		Barker Slough Pumping Plant Load	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	2,348,640	5,472	3,409	5,950	607,968	607,968	154,468	228
2	1,528,704	9,792	4,088	8,071	218,016	218,016	85,218	232
3	2,641,824	0	6,146	10,493	973,728	973,728	66,962	232
4	2,672,352	0	5,313	10,220	13,536	13,536	76,360	237
5	4,151,232	0	7,126	13,307	13,248	13,248	60,470	236
6	7,014,528	0	6,384	11,697	15,264	15,264	76,590	243
7	10,591,200	0	6,734	12,005	15,552	15,552	70,048	242
8	14,933,664	0	5,306	10,360	15,264	15,264	77,784	237
9	17,780,256	0	6,636	12,663	150,624	150,624	77,396	236
10	18,346,752	0	6,608	12,502	122,976	122,976	77,150	240
11	18,980,064	0	6,132	10,241	467,712	467,712	77,858	237
12	18,966,528	0	7,140	12,964	3,233,952	3,233,952	83,746	239
13	18,951,264	0	5,999	10,241	1,482,048	1,482,048	98,212	249
14	18,944,064	0	7,224	13,538	1,453,536	1,453,536	75,990	244
15	18,930,240	0	5,810	10,241	69,120	69,120	74,484	242
16	18,730,080	0	7,119	13,055	16,416	16,416	74,376	241
17	17,676,000	0	6,860	11,907	14,976	14,976	65,086	241
18	16,771,680	0	6,608	10,290	13,248	13,248	77,656	232
19	16,879,104	0	7,399	13,531	12,672	12,672	85,458	236
20	14,573,088	8,928	6,090	11,473	15,552	15,552	75,210	240
21	16,439,904	0	5,782	10,283	14,112	14,112	92,712	235
22	15,944,544	0	7,511	13,776	14,976	14,976	78,176	231
23	16,363,584	0	6,706	11,802	484,416	484,416	71,008	239
24	18,368,640	0	5,684	10,934	236,736	236,736	62,890	245
25	18,109,728	0	5,978	10,248	12,960	12,960	60,014	242
26	17,686,944	0	6,902	12,810	10,944	10,944	61,780	220
27	18,417,024	0	6,867	12,831	14,400	14,400	74,934	207
28	18,467,136	0	5,880	10,241	713,376	713,376	79,430	204
29	18,179,136	0	7,126	12,894	774,144	774,144	77,856	204
30	18,429,696	0	5,866	11,417	1,258,272	1,258,272	91,094	214
31	18,393,408	0	5,397	11,221	592,416	592,416	81,372	212
Total	456,211,008	24,192	193,830	353,206	13,052,160	13,052,160	2,441,788	7,217

**Table 36. San Luis Field Division Energy Data**

(in kWh)

**January 1997**

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	356,976	203,976	0	0	4,094,208	8,208
2	351,936	198,936	279,072	279,072	2,529,504	16,504
3	340,560	187,560	420,480	420,480	2,534,688	14,688
4	477,216	324,216	0	0	2,541,024	21,024
5	382,176	229,176	0	0	2,810,592	10,592
6	350,928	197,928	470,592	470,592	2,517,408	-2,592
7	370,656	217,656	372,384	372,384	2,517,408	-2,592
8	399,168	309,168	800,928	800,928	2,518,848	-1,152
9	382,896	292,896	790,848	790,848	2,454,336	6,336
10	327,312	237,312	0	0	2,733,696	37,696
11	379,008	289,008	0	0	3,657,600	685,600
12	345,744	255,744	0	0	5,838,912	-17,088
13	315,504	225,504	0	0	5,828,832	-27,168
14	318,384	228,384	0	0	2,948,544	-15,456
15	462,528	156,528	0	0	1,706,400	-1,600
16	424,800	118,800	0	0	31,680	31,680
17	414,720	198,720	180,000	180,000	1,553,184	21,184
18	385,488	191,488	0	0	1,472,544	16,544
19	334,800	195,800	0	0	27,648	27,648
20	425,952	209,952	798,336	798,336	24,480	24,480
21	397,008	181,008	2,880	2,880	29,088	29,088
22	401,328	185,328	0	0	29,952	29,952
23	287,712	40,712	0	0	29,088	29,088
24	167,616	51,616	838,080	-30,920	25,632	25,632
25	91,296	13,296	579,744	3,744	33,984	33,984
26	343,728	317,728	434,592	2,592	1,655,136	-24,864
27	344,448	71,448	710,208	-3,792	1,624,032	-2,968
28	341,712	68,712	761,184	-816	1,244,160	7,160
29	342,864	69,864	0	0	1,233,216	3,216
30	345,024	72,024	0	0	624,672	672
31	318,528	135,528	577,152	7,152	621,504	-2,496
Total	10,928,016	5,676,016	8,016,480	4,093,480	57,492,000	983,000

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

**Table 37. San Joaquin Field Division Energy Data**

(in kWh)

**January 1997**

Date	Las Perillas Pumping Plant Load	Badger Hill Pumping Plant Load	Buena Vista Pumping Plant Load	Teerink Pumping Plant Load	Chrisman Pumping Plant Load	Edmonston Pumping Plant Load
1	1,006	832	214,992	214,776	491,328	1,697,040
2	992	840	251,352	277,200	593,280	2,234,160
3	984	832	488,304	480,528	1,070,496	3,862,800
4	988	832	589,752	610,920	1,319,328	4,674,240
5	1,034	824	351,864	366,048	820,512	2,980,800
6	1,092	816	285,768	326,232	740,160	2,608,560
7	1,110	824	328,464	363,672	813,888	2,777,760
8	1,074	864	314,136	348,552	791,136	2,836,080
9	1,098	832	330,984	327,024	756,576	2,658,960
10	1,116	792	252,216	293,904	646,560	2,416,320
11	1,108	792	198,432	208,296	488,736	1,506,240
12	1,100	800	186,480	224,784	490,176	1,801,440
13	1,172	840	173,448	180,504	427,104	1,622,160
14	1,172	888	163,224	176,400	401,184	1,323,360
15	1,204	872	142,704	173,304	371,520	1,327,680
16	1,212	1,008	202,320	198,072	436,896	1,583,280
17	1,256	816	386,640	441,216	997,056	3,571,200
18	1,286	648	390,240	458,784	989,280	3,630,960
19	1,278	648	323,208	370,296	858,816	3,270,960
20	1,264	648	552,744	599,976	1,380,096	4,997,520
21	1,254	872	527,688	577,080	1,272,960	4,509,360
22	1,236	888	411,120	416,736	943,776	3,222,720
23	1,220	904	527,976	559,512	1,232,928	4,433,760
24	1,172	840	405,792	454,752	1,009,152	3,630,960
25	1,128	672	177,768	207,144	435,168	1,614,240
26	1,140	672	109,944	133,632	289,152	1,027,440
27	1,144	736	226,944	236,376	492,768	1,519,200
28	1,158	736	314,712	300,600	675,648	2,237,040
29	1,068	832	309,168	329,184	731,520	2,529,360
30	1,186	1,456	311,328	315,288	694,368	2,463,120
31	1,178	744	313,632	373,680	818,784	2,703,600
Total	35,430	25,600	9,763,344	10,544,472	23,480,352	83,272,320

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 1997**

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Mojave Siphon Powerplant Generation	Devil Canyon Powerplant Generation
1	186,704	449,928	600,000	0	13,248	0	690,528
2	264,768	623,592	600,000	0	13,320	0	696,000
3	452,368	808,848	600,000	0	14,088	0	316,896
4	492,240	1,125,216	600,000	0	76,764	0	0
5	345,296	599,112	600,000	0	15,036	0	0
6	257,768	1,059,552	384,000	0	78,264	0	0
7	301,336	310,968	384,000	0	25,416	0	0
8	163,688	0	384,000	0	189,480	0	66,240
9	120,792	295,200	384,000	0	313,860	0	98,592
10	107,520	0	384,000	0	394,632	0	307,968
11	11,312	126,216	384,000	0	188,592	0	458,976
12	40,432	0	369,000	0	397,080	0	421,728
13	25,592	163,512	384,000	0	203,700	0	79,680
14	60,424	749,664	384,000	0	80,184	0	82,944
15	143,696	332,640	384,000	0	19,152	0	82,272
16	191,800	444,168	384,000	0	18,888	0	78,432
17	441,504	974,088	384,000	0	19,092	0	254,880
18	411,936	973,152	2,760,000	0	18,132	0	447,552
19	219,800	496,728	2,880,000	0	201,732	0	383,232
20	410,424	1,059,768	1,440,000	0	201,888	0	41,280
21	357,224	508,968	1,440,000	0	318,912	0	0
22	321,608	795,672	1,440,000	0	110,568	0	0
23	445,928	960,048	1,440,000	0	25,248	0	0
24	417,256	940,752	1,440,000	0	17,364	0	192
25	197,176	956,304	1,440,000	0	131,232	0	0
26	128,072	793,512	1,440,000	0	15,900	0	0
27	186,312	516,888	600,000	0	16,308	0	0
28	252,728	507,240	600,000	0	15,828	0	0
29	284,312	443,304	600,000	0	15,948	0	0
30	294,168	544,968	600,000	0	16,032	0	0
31	332,472	601,560	600,000	0	15,036	0	0
Total	7,866,656	18,161,568	26,313,000	0	3,180,924	0	4,507,392